THE AMERICAN JOURNAL of OCCUPATIONAL THERAPY

OFFICIAL PUBLICATION OF THE AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

Vol. IV, No. 1 | 1950 | January-February

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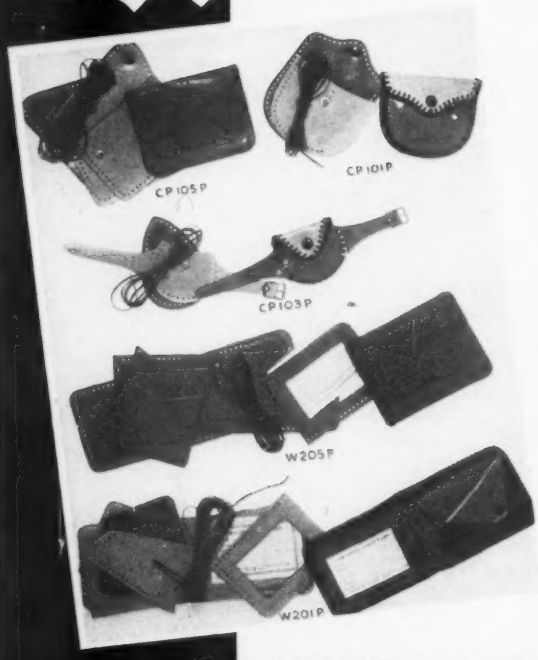

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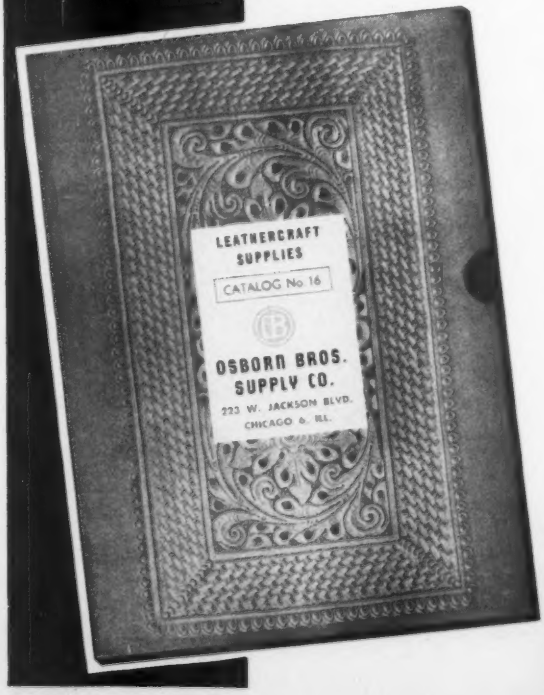

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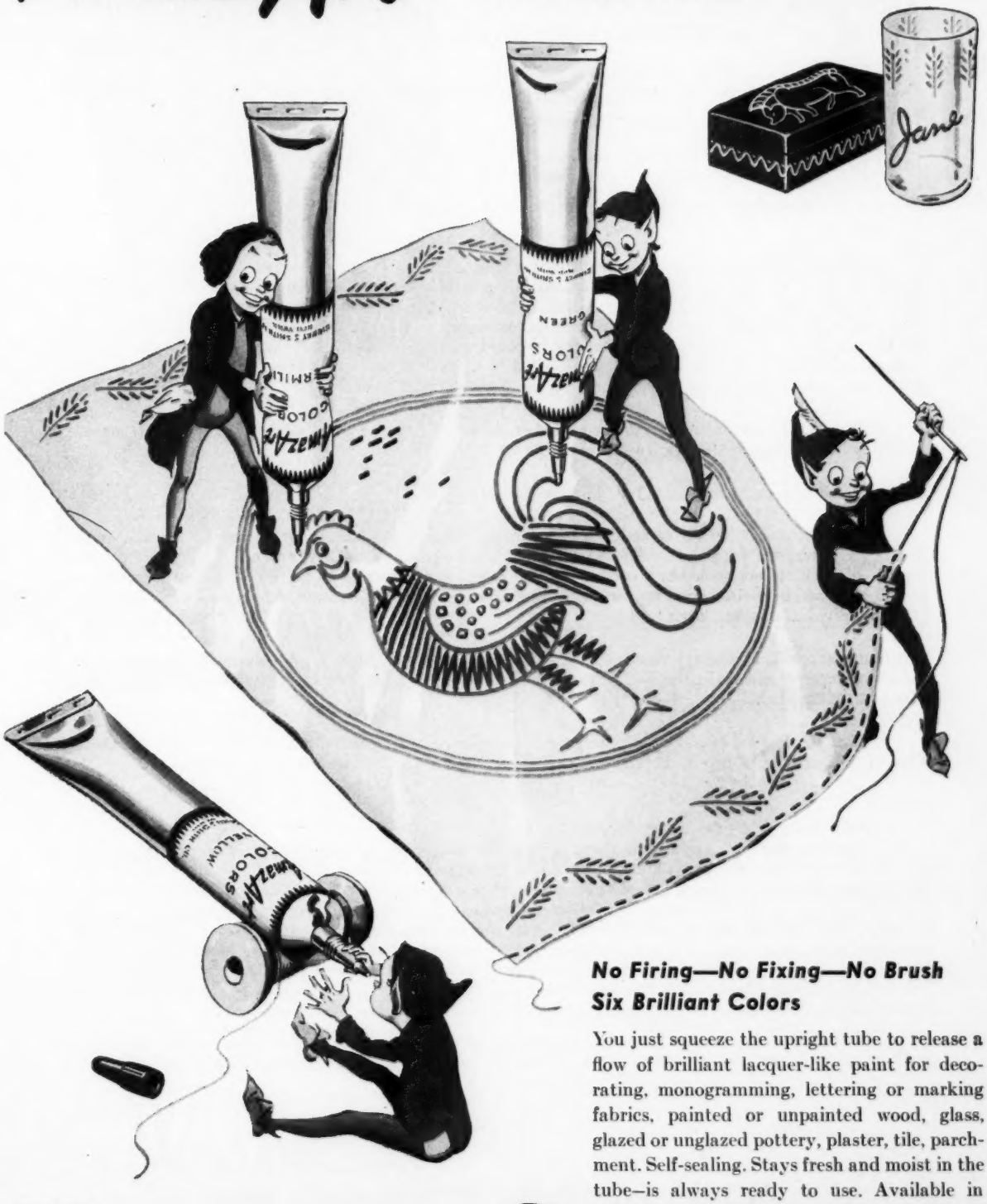

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Of American Journal of Occupational Therapy published bi-monthly at Milwaukee, Wisconsin for October 1, 1949.

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Sworn to and subscribed before me this 5th day of October, 1949.

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(My commission expires April 16, 1950)

THE AMERICAN JOURNAL

of

OCCUPATIONAL THERAPY

Official Publication of the American Occupational Therapy Association

VOL. IV, NO. 1 JANUARY-FEBRUARY 1950

Occupational Therapy For The Quadriplegia Patient*

BEVERLY J. RICHERT, O.T.R.

The quadriplegia patient, with complete or partial paralysis, presents one of the most challenging problems in occupational therapy. He must be assisted with even the most basic activities of living, such as eating and writing. When each case is considered on its own merits, the results of the guided program of rehabilitation can be spectacular. All sections of Physical Medicine Rehabilitation Service at this hospital contribute toward the total rehabilitation of this type patient. Occupational therapy is only one part of the large team striving to improve the daily life of the quadriplegia patient.

The information for this article was obtained from the Neurological Service and the Prosthetic Appliances Unit at the Veterans Administration Hospital, Hines, Illinois. Three typical cases are being used to illustrate the part played by occupational therapy in the treatment of cervical cord injuries, resulting in a quadriplegia. Occupational therapy is given both in the clinic and at the bedside on the ward. Those patients who can come to the clinic receive at least one treatment daily with treatment time of approximately 30 minutes, and if possible for a long period up to one hour. The patients confined to the ward receive treatment daily for periods of 15 to 30 minutes approximately depending on the general physical tolerance of the individual patient.

A 32 month study (April, 1946 to January, 1949) of 96 quadriplegia patients, showed upon admission, 38 unable to feed themselves without adaptive equipment. Eight of these 38 were later able to eat without aids. Six of the 38 still had to be fed. Thirty-five needed special writing equipment on admission, and four of these were later able to write without aids, Six were physically unable to write. Fifty of the 96 patients were supplied with adaptive devices, for typing, shaving, combing and brushing hair, brushing teeth, filing nails, and propelling wheel chairs. Sixty-three participated in exploratory activities including lapidary, finger-painting, radio construction and repair, hooking rugs, ceramics, photography, plastics, leather work, felt and yarn work, braiding, weaving, knotting, tropical fish culture, shell jewelry, model trains, fly-tying, crocheting, drawing, wood-working, and stamp collecting.

The objectives of occupational therapy for the quadriplegia patient are:

(1) To maintain existing strength, range of motion.

(2) To improve strength and increase range of motion.

(3) To develop coordination, motor skills and work tolerance.

(4) To stimulate self-reliance through the use of special appliances which aid in self-care tasks inherent to daily living.

(5) To prevent the building of unwholesome psychologic reactions or to correct them if they are already established.

A spastic paralysis exists in the majority of cervical cord lesions, therefore, the main therapeutic goal is to increase the functional capacity of the patient as a whole. In order to accomplish this, the patient-therapist relationship must be one of complete confidence and cooperation. The occupational therapist must be able to explain to the patient the methods and objec-

*Sponsored by the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the author, are a result of her own study and do not necessarily reflect the opinion of the Veterans Administration.

tives of his treatment plan; she must evaluate the capabilities of the patient and utilize them to the fullest so that the ultimate result will be the best possible. Failure in attempts to perform certain desired movements is the basis of discouragement and frustration. The occupational therapist must anticipate the patient's need for assistance and be available to him without being asked.

REPRESENTATIVE CASES

Case 1: A veteran, male, aged 18, was injured in an automobile accident in August, 1945. There was immediate paralysis of the four extremities, resulting from a fracture dislocation of the fifth and sixth cervical vertebrae. The patient was admitted to Hines May 1, 1946. Four years after the injury there was still no voluntary motion in the lower extremities; the muscles of the upper extremities had fair to normal strength except for the triceps and small muscles of the hands, which were flaccid and completely paralyzed.

Fig. 1. Adapted equipment for quadriplegia with flaccid paralysis, showing interchangeable comb, spoon, and writing and painting attachment.

In September, 1947, this patient was provided with an adaptive device for eating and writing (Fig. 1), which he accepted with hesitancy and fear of failure. However, after several trials he was able to use the device adequately. In spite of success in being able to feed himself, he continued to be hesitant and fearful, and for the following six months the therapist had difficulty maintaining a conversational contact with him. Marked improvement in the patient's attitude was evidenced shortly after another quadriplegia patient was placed in the next bed. After observing the successful use of several adaptive devices, he requested a tooth brush device for himself.

The tooth brush device (Fig. 2) was used by rolling it between the back of one hand and the palm of the other. After success with the tooth brush, the patient rapidly progressed to a hair brush of his own design, (Fig. 3). When he first received the adaptive device for eating and writing, a pencil was used in the writing arm so that mistakes could be easily corected. He proceeded very slowly with writing, practicing occasionally on his own. By June, 1948, he had gained enough confidence in his ability to write so that a pen was used in place of a pencil, and from this point there was a greater interest in writing. The patient also used a nail file riveted to a metal cuff in a manner similar to the hair brush.

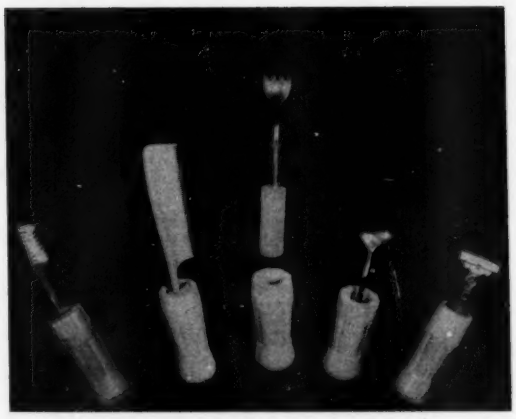

Fig. 2. Adapted equipment for quadriplegia with limited grasp, showing removable utensils in rubber grips.

By January, 1949, this patient was able to leave the ward occasionally and propel his own chair for short distances of 400 to 500 yards. Since normal sensation does not exist in his hands, he wears protective gloves patterned after golfing gloves. This type of glove protects the palm but leaves the last three fingers free, facilitating putting on the gloves.

Resistance and reluctance is often found in patients who have been dependent for many months. Newly injured persons seem to accept adaptive devices more rapidly, especially if they observe other patients successfully using them. A small percentage of quadriplegia patients shortly after injury are afraid to attempt anything for fear of failure. It appears that some of these patients feel that if they succeed with one task, that they will gradually be forced to increase their independence. The initial task of alleviating some of their fears is difficult and it may take as long as a year and a half, or more.

Case 2: The 23 year old, male veteran shown in Fig. 4, was injured in a diving accident in June, 1946. There was a compression fracture of the fifth cervical vertebrae with immediate paralysis of the four extremities and anesthesia below the region of the neck. At the time of writing, the physical picture showed claw-like hands and flail wrists; elbow flexion was

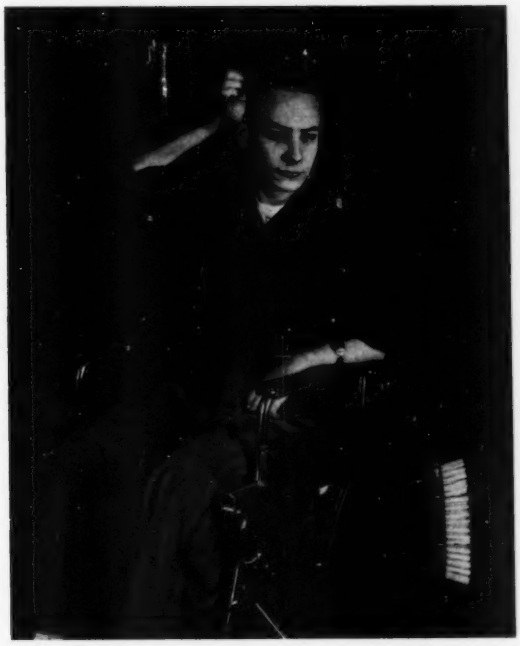

Fig. 3. Quadriplegia using adapted hair brush. Inset shows metal cuff, riveted to hair brush, that fits over the back of the hand.

good bilaterally, but elbow extension was negligible bilaterally; supination was weak and pronation absent bilaterally. Shoulder abduction was good and adduction poor bilaterally. The biceps muscles were shortened. The right upper extremity was stronger than the left in all movements.

A plastic tray was fitted over the arms of his chair to provide space on which to perform daily activities and to afford more security of balance while sitting upright. The patient received an adapted device for eating and writing (Fig. 1), eight months after his admission to the hospital. He was able to eat soft foods easily after one or two trials, and it was not long before he took a real interest in getting out of bed into the wheel chair to eat his meals.

In some instances, a patient is able to write with little or no instruction, but in this case the occupational therapist supervised his writing for three to four months. Large unlined paper was used first then the paper was lined with lines ranging from two inches to one-half an inch. To date, he uses unglazed, unlined paper and a regular fine point pen. There was obvious gain in self-confidence when he was able to take care of his own correspondence.

Approximately two long holidays a year, Christmas and Easter, are spent with his family in a neighboring state. Unlike the first time he went home, he now proudly displays any new adaptive device or skill that he has acquired since his last visit. When at the hospital he seems to be much more sociable and frequently leaves the ward. He was given textile painting in occupational therapy. His initial attempt was five minutes, but after two weeks his work tolerance was increased to half hour periods. The paints had to be mixed for him and the stencil put in place, thus enabling him to successfully complete several paintings, displaying unusual color sense, and an increased control of the brush.

He used all the adaptive devices shown in Fig. 1 until October, 1948, when he discovered he could use built-up silver for eating (Fig. 2). However, he continued to use the comb and the writing attachment in the splint. In an effort to help him utilize the existing strength in the upper extremities when propelling his wheel chair, the pushing rim was extended away from the wheel approximately two inches. Four additional extensions (not shown), were put in, thus making eight connections between rim and wheel, allowing him to turn the wheel one-eighth of a turn with one push. He wears protective gloves and a chest strap while operating his own chair.

Case 3: A tumbling accident was the cause of the cervical fracture suffered by the 28 year old, male veteran in Fig. 5. The physical picture showed that the right biceps had good strength and range of motion, that the other muscles of the shoulder and forearm were poor, and that the muscles of the wrist

Fig. 4. Quadriplegia stencil painting with aid of plastic device. A pen is interchangeable with the brush.

and hand were flail. The left upper extremity had only a trace of movement in the biceps and no other active movement. He is able to feed himself, write, paint, and type while sitting in the wheel chair. He uses a plastic eating and writing splint similar to that shown in Fig. 1 that extends beyond the flaccid wrist. He has developed a keen interest in textile painting and uses the splint with a brush in place of a pen. Particular patterns of movement have been stressed in this activity which increases the strength of upper arm muscles. He shaves himself while lying in bed using a sling for support of the forearm. There is no active motion of the triceps.

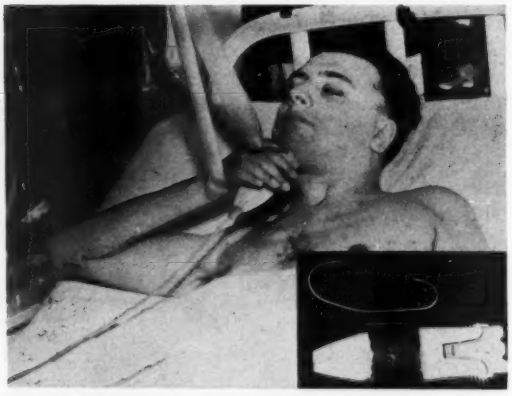

Fig. 5. Quadriplegia using electric razor with support of sling. Inset shows metal sleeve from which the razor is removable. The cuff is riveted to the sleeve.

CONSTRUCTION OF EQUIPMENT

Fig. 1. The adaptive device shown is used for patients with flaccid paralysis of the hand but with some control of the wrist. (Fig. 4.) A similar device may be used for those without wrist control by making the splint to extend beyond the wrist.

It is necessary to make a cast on which to shape this splint. The lower forearm and the hand are prepared by applying a 1/8" layer of vaseline or cold cream or by using tubular stockinette over the forearm and hand. A strip of webbing, one-inch wide and one-sixteenth inch thick, is placed on the anterior surface of the forearm and hand over the stockinette as a protection for the patient when the case is being cut, and a narrow leather thong, longer than the webbing is placed in the middle of it for purpose of guiding the cutting. The thong is lifted up as the cut is made. Seven-minute plaster bandages, obtainable at most drug stores, are convenient to use in making the cast. The roll of bandage is placed in warm water and let soak until the rising air bubbles are no longer visible. Remove the roll from the water, hold at each end and squeeze excess water out, retaining as much plaster as possible. Wrap bandage from the middle forearm to the end of the fingers, leaving the thumb free. Wrap loosely to eliminate the formation of ridges in the cast. Several plaster bandages may be needed to make the cast thick enough. While the plaster is still damp, check the desired position of the extremity and hold it that way until the plaster sets. Lines drawn perpendicular to the cutting line before the cut is made will facilitate approximating the edges of the cast after removal. A cast-cutter or knife is used to cut the cast. Another plaster bandage is used to close the cut and the open finger.

The plaster for the positive case may be prepared when the negative cast has fully set. The time of the latter is dependent on the setting time of the plaster bandage used. When the plaster is being poured into the negative cast, hold a rough metal rod, approximately 12 inches long, in the center of the cast until the plaster sets. The free end of the rod extending beyond the base of the case is later used to fasten the cast in a vise to facilitate working with the model.

The negative cast is removed after the positive sets. The positive case is scraped with a knife, shaving down the high spots. The low areas can be filled in with small amounts of plaster. The final finishing of the cast can be done with a fine piece of wire screening. Let the cast dry thoroughly at room temperature or in a slow oven.

The cast being prepared, the making of the actual splint is next. Outline on the cast the area to be covered by the plastic. Trace this outline on paper, adding one-half inch all around with the exception of the thumb crotch. The extra allowance will be taken up in the bending of the plastic. Transfer the pattern to a piece of one-eighth inch plastic, leaving the protective paper in place on the plastic. Cut the plastic out.

Padding the case is very necessary to insure an efficient splint. This may be done with mole skin or one-sixteenth inch felt. The mole skin, when warmed slightly, will stick to the cast; the felt is tacked in place. Fit the padding within the outline drawn on cast.

Before heating the plastic, remove the paper. The plastic will become flexible in a few minutes at 250 degrees Fahrenheit. When it is soft, remove it from the oven and place it on the cast. Working rapidly, anchor an elastic bandage tightly around the wrist area, then completely cover the plastic with the bandage. This elastic bandage gives an equal pressure throughout the splint while the plastic is cooling. Finish the splint by trimming the edge, then sand and buff.

The sleeve that accomodates the utensils is located on the underside of the splint. It is a three-quarter inch dowel with a one-half inch hole drilled through

it. A disc of one-sixteenth inch plastic is cemented to the end of the sleeve. A fine hole drilled in the disc will eliminate the problem of suction within the sleeve. One side of the sleeve is filed and sanded flat. The area on the splint where the sleeve is to be fitted is heated. The sleeve and splint are then fastened together by using the solvent for the particular brand of plastic being used.

The elastic band is riveted on with aluminum rivets that are soft and rust resistant. A regular snap fastener is used, the eyelet being set in the plastic and beveled over to hold it in place. No button is used.

The utensils are prepared by inserting their handles into a one-inch plastic dowel. One side of the dowel is flattened to prevent turning in the sleeve. A key may also be used to prevent turning.

Another method not pictured is to prepare the sleeve as above, cutting a one-eighth inch slot on its under surface. Then on the handle of the utensils fasten a thumb-screw. The utensil will fit in the sleeve and the thumb-screw will tighten down to hold it in place. A similar screw may be used on the writing attachment so that it will accommodate both pencil and pen as well as a paint brush.

Fig. 2. The plastic handles are for patients with limited grasping power and are inserted into rubber handle bar grips. The surface of the rubber grip makes it easier to grasp.

Fig. 3 and 5. Lightweight aluminum cuffs are made for brushes and razors. For the brush, holes are drilled in the brush and the aluminum is riveted in place with soft aluminum rivets. The aluminum is then bent to fit the patient's hand. Particular attention must be given to the angle of the brush required by the individual patient. A sleeve, from which the razor is removable, is riveted to the cuff. This cuff fits snugly over the razor.

Fig. 6. Patients with limited use of their fingers prefer this simple leather device. Florence Parlin[1] showed several other uses for this device in addition to the one for writing.

Fig. 6. Quadriplegia writing with aid of leather splint. Inset shows simple construction of writing splint.

CONCLUSION

The objectives of occupational therapy with the quadriplegia patient have been outlined in this article and three typical cases used to illustrate these objectives. A detailed discussion of the construction of adaptive devices has been given.

The author is indebted to the Medical Illustration Laboratory at the Veterans Administration Hospital, Hines, Illinois, for the photography, and to the Prosthetic Appliances Unit for the adaptive devices.

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Concepts and Techniques of Occupational Therapy for Neuromuscular Disorders

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and

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The possibilities for recovery of motor function in patients with disease or injury of the nervous system have been greatly increased by recent advances in methods of neuromuscular rehabilitation[1]. Since activity in the nervous pathway and in the contracting muscles is the basic therapeutic element, maximal activation of the neuromuscular mechanism by resistive exercises renders therapy more rapid and effective. Proper guidance of active motion helps to eliminate substitution and abnormal patterns of motion and overflow. Careful correction of muscle imbalance produces a more normal relationship of antagonistic muscles. Most significant in accelerating the development of voluntary motion in severely paralyzed muscles are reinforcement techniques for guided resistive exercise utilizing primitive mass movement patterns, certain reflexes, synergistic motions, symmetrical bilateral motions, etc. These methods effectively restore motor function by activation of remaining dormant neuromuscular pathways and development of new functional pathways in the undamaged areas of the central nervous system to compensate, at least in part, for the functional loss from irreversible lesions. New and specific techniques have been developed which open new horizons for patients with spasticity, athetosis, lower motor neuron paralysis, cerebellar intention tremor, Parkinsonian rigidity, and chronic rheumatoid arthritis.

The physical therapist works primarily to develop elementary voluntary motions and simple combinations of motions. Techniques of neuromuscular reeducation not only develop and improve function in the muscle itself, but in the entire nervous pathway. It has been possible to demonstrate that new habit patterns for combinations of motions and for complex motor activity can also be produced rapidly and effectively by the use of guided resistance in these patterns. For example, the development of balancing patterns for sitting, kneeling and standing has been accelerated by use of resistive exercises for the complex pattern or for elementary parts of the pattern. This method is utilized in correcting abnormal patterns and has often been successful in overcoming habitual incorrect motions of many years duration with remarkable rapidity.

In occupational therapy, the primary objective is to develop or correct patterns of motion in skilled activities of the upper extremities with the goal of achievement of essential skills for self-care or as a preliminary to specific vocational training or employment. A fundamental principle in the development of complex patterns of voluntary motion in patients with paralysis is the step-wise advancement from elementary motions, to simple combinations of two, three or more motions which are essential parts of the complex pattern, and finally to the specific skilled activity. This process has been accelerated by the judicious use of resistive exercises by the occupational therapist, closely integrated with the physical therapy and gymnasium programs.

New patients are accepted for admission to the Institute only after a thorough medical examination which includes a complete history, physical examination, neurological examination, evaluation of functional capacities and disabilities, complete muscle testing performed by the doctor and psychological and psychiatric evaluation. Patients are accepted only if a reasonable rehabilitation goal can be achieved and the patient has the will and the capacity to work cooperatively for this objective for a long enough period of time. Patients are not accepted if their problem is not primarily one of neuromuscular rehabilitation; if complications contra-indicate necessary activity and exertion in treatment; if the patient lacks incentive, and psychological and psychiatric factors interfere with necessary cooperation in the program; if the nature and severity of paralysis make further recovery of function impossible or of no practical value; and if previous treatments have resulted in achievement of the patient's maximum potentialities

*The Kabat-Kaiser Institute is a non-profit organization devoted to rehabilitation of neuromuscular disorders. The Institute has four treatment centers: Vallejo, Santa Monica and Oakland, California, and Washington, D.C. Over 500 patients are receiving intensive treatment at the Institute at one time.

(1)Kabat, H. *Studies on Neuromuscular Dysfunction, XI: New Principles of Neuromuscular Reeducation;* Permanente Foundation Medical Bulletin, Vol. V, No. 3, November, 1947, Page 111.

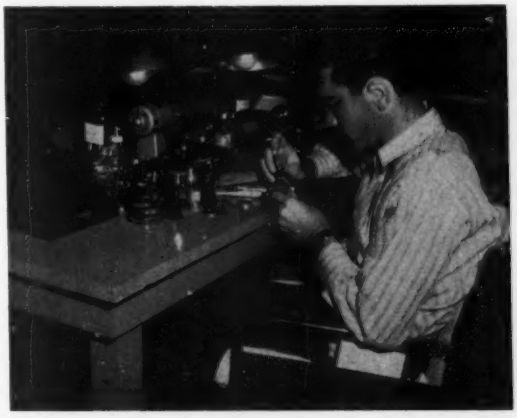
for overcoming his disability. Patients are accepted for treatment regardless of the severity of the disability if the disability can be eliminated or substantially reduced by treatment. Patients are accepted for treatment regardless of the complexity of the problem even though a variety of different types of specialized

Functional Occupational Therapy Shop

treatments are required in order to accomplish the objective. In other words, if a patient can be rehabilitated only by a combination of orthopedic surgery, neurosurgery, plastic surgery, urological surgery, general surgery, medical treatment of various types, ophthalmologic treatment, otologic treatment, dental care, drug therapy, orthopedic appliances, physical therapy, occupational therapy, gymnasium therapy, speech therapy, psycho-social adjustment, psychiatric therapy, vocational guidance, vocational training and general education, these treatments can be properly planned and carried out at the Institute to achieve the desired goal of rehabilitating this individual.

At the time of the original examination and evaluation the general approach to rehabilitation of the patient is worked out and plans made for necessary treatments in the proper sequence. The patient is assigned to a physician who is in charge of all phases of the patient's rehabilitation program and responsible for starting the patient with the various therapists and closely supervising every aspect of the program throughout its course. The patient is assigned to the physical therapist, occupational therapist, gymnasium therapist, speech therapist if necessary, etc. who will work with that patient during his stay at the Institute. The patient is started in physical therapy by the physician who demonstrates to the physical therapist the detailed techniques to be applied for each motion or combination of motions to be carried out in the treatment program. This includes therapy for individual motions for power, endurance and coordination and range of motion, therapy for relaxation of spasticity or spasm, treatment for development of proper essential patterns for balancing and analysis and correction of posture and gait. The correct psychological approach to the patient's problems is also indicated. The therapist will then give the patient individual treatment daily for one to three hours, depending on the severity of the case, following the specific prescription of the physician.

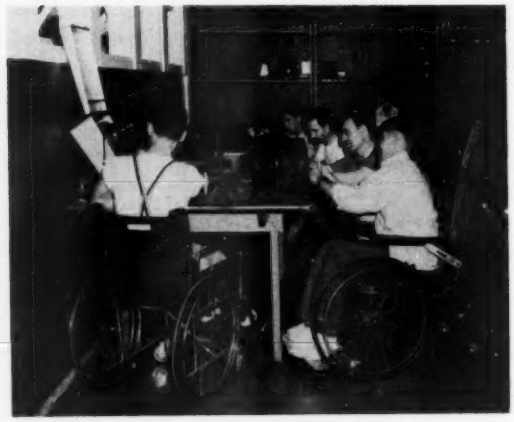
In a similar way the patient is started by the physician on a supervised gymnasium program, demonstrating the prescribed exercises to the gymnasium therapist. He is started by the physician on speech therapy if this is necessary, on mat work, gait training, etc. Each patient with a disability that can be benefited by functional occupational therapy begins his program with the doctor demonstrating to the occupational therapist the detailed prescription of activities and treatments to be carried out. Patients who have disabilities that require diversional occupational therapy, prevocational or vocational training are given a program by the occupational therapist in consultation with the physician. The doctor also prescribes the necessary orthopedic appliances, drug therapy and medical treatment for the patient. Each patient is encouraged to participate in the planned and organized recreational program and given activities based on interest, capacity, psychological adjustment and rehabilitation goals. The patient's day is a full one and the doctor in charge of the case is responsible for scheduling the time devoted to each activity in the course of the day and evening.



Watch Repairing for Vocational Training

The patient is interviewed by the vocational counselor who, in cooperation with the physician and occupational therapist, determines the vocational objective, and makes plans for carrying it out. The patient is also seen by the social worker who helps the patient adjust to the hospital situation, gives him an understanding of the rehabilitation program and also aids in solving problems both in the hospital and back home. Each phase of the patient's program is closely supervised and directed by his physician who checks

him with his therapists at frequent and regular intervals. His physician also takes care of the medical problems and needs of the patient throughout his stay. His doctor is alert to the psychological problems of the patient and helps him adjust and cooperate more effectively in consultation with the various therapists, social worker, the recreational director and the vocational counselor.



Vocational Training in Radio Repairing

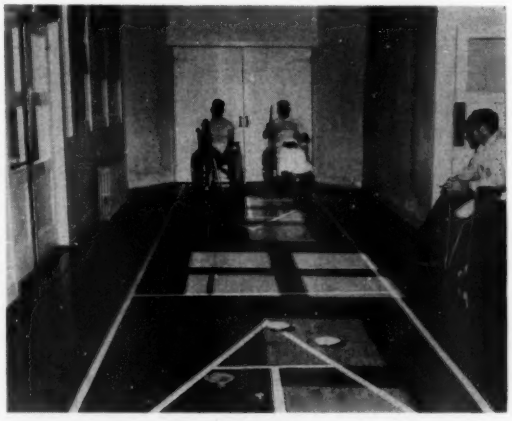
If a patient has a complex problem requiring major surgery and treatment of serious medical complications as well as a therapy program, a careful plan is worked out for the timing of surgery and medical procedures in relation to the therapy phases of the program for the most rapid and effective rehabilitation. Wherever possible, surgery is completed before the therapy and training phases of the program are undertaken. In some instances this is impractical and unwise and therapy may be started, discontinued during surgery, and then resumed. As an example, muscle reeducation may be carried out for several months to restore function in muscles, discontinued for surgery for tendon transplants and resumed to develop maximum function in the transplanted muscles. During the periods when the patient is convalescing from surgical operations or receiving medical treatment and confined to bed, a diversional occupational therapy program is prescribed.

At the time of the admission to the Institute each patient is given a routine evaluation by the occupational therapist for functional abilities and disabilities, for essential practical activities of self care in all phases including: feeding, dressing, toilet, use of utilities, ambulation without support or with crutches or canes, elevation, putting on and removing braces, use of a wheel chair and self care in bed. Approximately one hundred specific activities are tested and graded under the following:

a. Normal performance.
b. Adequate performance.
c. Can perform activity without assistance but with great difficulty and longer than normal time.
d. Can perform activity with assistance.
e. Cannot perform activity.

A summary of this evaluation is presented to the patient's doctor who determines whether or not a functional occupational therapy program is required. This evaluation is made at regular intervals throughout the patient's treatment program and again when he leaves. Patients who have disabilities of any degree in use of the upper extremities for self-care activities are given a functional occupational therapy program at some phase of the rehabilitation program to overcome these disabilities to the greatest extent possible. The physician sets up the practical goals for use of the upper extremities on the basis of the type and severity of paralysis, the possibility for recovery of function by any type of treatment and the functional evaluation of disability. The patient is seen by the doctor with the occupational therapist and he observes the patient attempt the various essential activities in which disability is present. The doctor decides on the specific immediate goals to be achieved and demonstrates on the patient the detailed techniques to be applied by the occupational therapist.

In case of severe paralysis of the upper extremities it may be evident from this examination that the patient fails to accomplish any essential complex activity or can only accomplish the activity with abnormal and



Hallway Provides Shuffleboard Court for Wheelchair Patients.

bizarre substitution patterns. The program for this patient will not include the complex activity at that time. As an example: If the goal is feeding with a spoon, the patient who fails to accomplish this activity or does so with abnormal patterns is not allowed to attempt that activity directly. The goal still remains feeding with a spoon but the doctor prescribes simple combinations of two or more motions which are components of the normal complex pattern and which the patient can accomplish. Usually, in order to develop

more rapidly the pattern of the combination of motions under voluntary control and to build power and endurance, this activity is prescribed as guided resistive exercise for the combination of motions. The proper resistance is used which may be additional weights, or work against gravity, or work with gravity eliminated, or resistive motion with specialized apparatus, resistive exercise utilizing friction such as gross wood-working activities, etc. As many simple combinations of motions which are components of the desired complex pattern are prescribed as the patient can carry out successfully. Resistance is graduated and changed periodically and the complexity of combinations is advanced until the patient is capable of performing the desired complex activity with a good pattern.

If the patient cannot successfully perform simple combinations of motions essential for the activity, occupational therapy is deferred and emphasis is placed on development of individual motions in physical therapy until combinations become possible. The physician determines which activities can be improved or developed through occupational therapy and which activities will only be possible of achievement after other treatment including physical therapy, surgery, appliances, etc. He also decides which activities cannot be achieved at all. In cases where occupational therapy for a specific self-care goal must be deferred, the physician plans and prescribes an intensive program of necessary treatment toward this goal.

Many patients have weakness, lack of active range, fatigability and substitution and imbalance of finger and thumb motions which constitute a basic deficiency for many types of essential activities of the upper extremities. In order to improve function, a glove is used with bands of dental dam to provide resistance in the desired motions. Splints and small plastic casts are also necessary in some cases to achieve the proper pattern. The program for use of the glove is prescribed by the physician on the basis of the muscle test and the desired goals, and carried out by the occupational therapist. Individual motions or combinations of motions can be treated by means of the glove. With proper training, the patient can use the glove therapeutically by himself and can also use it for treatment at home.

In every case an attempt is made to achieve the maximum in self-care activities as an immediate goal, regardless of the ultimate objectives. For example, a patient who has very poor function of the hand, but who has some of the gross motions of shoulder and elbow under voluntary control and is unable to feed himself because of the hand paralysis, an apparatus, such as a cuff around the hand with the utensil attached, is utilized so that the patient can immediately start to learn to feed himself with a proper pattern, increase his endurance, and improve his morale. It also helps to develop voluntary control and coordination in gross motions of the arm. At the same time the ultimate objective is not overlooked and the patient is given a program of therapy and use of the glove if this is practical, to improve hand function so that more skilled use of the extremity becomes possible.

Specialized Games for Group Activity.

A careful analysis of the attempt at a self-care activity may reveal that the patient has great difficulty or fails to carry out the skilled motions because of excessive weakness of certain motions. In some cases it may be evident that sufficient power and endurance in those motions for this specific activity cannot be developed by treatment. This does not necessarily preclude the achievement of that self-care activity. One approach to reaching the objective would be for the physician to prescribe an adequate substitution pattern. In other instances, the goal is reached by supplementing the deficient power with apparatus utilizing elastic such as dental dam, springs, functional braces with proper support and free motion of joints in only certain directions, and other devices specially designed to meet the patient's individual needs. An example of this would be a patient recently treated at the Institute with a transection of the spinal cord at the 6th cervical segment who had complete paralysis of the hand with no possibility of recovery of motor function in fingers and thumb. A plastic shell was specially designed and built over the back of her hand which operated on the same principle as the prothestic hand, with opposition of thumb and fingers produced by a spring and opening of the hand by elevation of the shoulder. With training in the use of this device, physical therapy to build up gross motions of the arm and occupational therapy against resistance to develop the patterns in simple combinations for complex activity, this patient's range of individual self-care activities was developed tremendously.

Patients who have adequate power to perform functional activities but who lack coordination and have intention tremor from cerebellar involvement require

a somewhat different approach to treatment in occupational therapy. If the patient succeeds in performing the activity, he is given training in coordination by practice in occupational therapy. If he has great difficulty or fails to perform the activity, simpler combinations are prescribed but emphasis is placed on isometric contraction, duration of motor innervation and stabilization of individual joints at various points in the range, rather than on active power against resistance. Smooth submaximal contraction and relaxation in simple combinations is often prescribed. The localization of the major source of tremor in specific motions determines the points of major emphasis. Special equipment for finger coordination has been developed to suit the needs of this type of patient and can readily be individualized. In some cases, the tremor may be violent and difficult to control and splints may be used to stabilize particular joints, where possible. In other instances, special braces have been developed utilizing friction at the joint to eliminate the tremor. This is possible because the voluntary power usually greatly exceeds the power of the tremor motions. Therapy of various types to improve coordination and voluntary control, and reduce the tremor are continued intensively, in order, at a later time, to eliminate the need for such friction joint braces.

Patients with astereognosis resulting from sensory loss in the hand present a special problem. Such patients frequently also have paralysis or incoordination of various degrees and require treatment for those aspects of the disability. However, they also must be trained in hand-eye coordination and have greater difficulty in developing skilled patterns than patients without sensory loss.

In patients with less severe disabilities of the upper extremities, occupational therapy is directed at improving the performance in self-care activities by practice under supervision in those activities, working for endurance, coordination, speed, skill and greater power, with or without resistance. Such patients also engage in finer skilled activities such as wood-working, plastic, leather, ceramics, typing, drawing, weaving and other craft activity. These are prescribed by the physician with the specific objective of building power, endurance, and coordination in certain motions, for building up work tolerance, for morale, or as a phase of vocational testing and guidance, i.e., for exploration of possible vocational goals.

The occupational therapy program is not limited to patients with involvement in the upper extremities. For example, patients who have disability in standing because of paralysis or incoordination in the lower extremities, work in occupational therapy carrying out skilled activities with the uninvolved upper extremities while standing up. In this way they build up power and endurance in standing, and improve in standing balance. The activities they perform standing up vary a great deal and include writing on a blackboard, drawing or painting at an easel, woodworking, plastic and other craft activities, various wall games, etc. Other patients have paralysis or tremor in neck or trunk which causes disability in self-care activities and the occupational therapy program is prescribed to overcome weakness and build endurance and coordination necessary for overcoming the disability. As an example: The patient is given a program of feeding activity in the uninvolved upper extremities while concentrating on holding the head erect against resistance. Occupational therapy is also given in chewing, swallowing, drinking, sucking through a straw and other essential activities. Many patients have involvement of other parts of the body and of the upper extremities as well and specific occupational therapy programs are worked out to meet their individual needs. Patients with aphasia, apraxia, emotional instability, organic mental change, mental deficiency, etc. are given prescribed occupational therapy programs to improve their attention span, improve in ability to cooperate and concentrate, overcome fear, and develop self-confidence and self-reliance.

Functional occupational therapy is carried out by the patient daily under supervision of the occupational therapists. Also individual treatment is given in occupational therapy daily or several times a week, depending on the needs of the patient. When the patient is ready to leave the Institute, a home program in occupational therapy is prescribed by the physician and training given by the occupational therapist to the patient and to the attendant or member of the family so that the home program will be effective. The patient returns to the Institute at intervals for checkups and the physician evaluates the entire program, including occupational therapy. Intensive training in the new home program is provided by the occupational therapist.

In normal daily living, recreation must not be overlooked and to this end, a fairly extensive program has been developed. For those patients who are physically unable to participate actively, there are movies twice a week in the wards and in the recreation room, record concerts at regular intervals, letter writing and shopping service, television shows and live talent variety shows.

Wheelchair square dancing, bingo, shuffleboard tournaments, trips to the ball games, theatres and around the country-side are available to patients who are able to take advantage of these activities. The patients themselves have formed a club which publishes a monthly newspaper, plans parties and outings and helps organize all recreational activities.

Most patients at the Institute have been unable to carry on their usual occupation because of disability. Many of these patients will be unable to return to their occupations despite the most effective treatment. An example is a coal miner who sustained a back injury in a mine accident which resulted in transection of the spinal cord and paraplegia. He can never

return to his usual occupation of mining. He has been unable to work because the severe paralysis has made him non-ambulatory, because of serious recurring illnesses as complications of paraplegia, psychological factors of despondency and lack of self confidence, as well as lack of education and specific skills required for a new occupation. Since the upper extremities are not involved, this patient does not require specialized treatment to overcome paralysis of the upper extremities. On the other hand, occupational therapy along with a gymnasium program are essential to help build up power and endurance in the upper extremities preparatory to ambulation with braces and crutches. Also, the patient requires training in gross self-care activities such as sitting up, moving about in bed, moving from bed to wheelchair, etc. This training and practice is essential in achieving independence, gaining security, overcoming fear and developing endurance necessary for the routines of every day life.

The program is carried out by a team directed by the physician, including the physical therapist, gymnasium therapist, and occupational therapist. The paraplegic also requires psychosocial adjustment, vocational guidance, prevocational and vocational training, and, often, general education. The patient is encouraged to take part in a variety of prevocational activities including crafts of various types and training in radio repair, small appliances repair, upholstery repair, office work, etc. These activities help to develop work tolerance, interest, and concentration. They provide a range of skills that the patient can explore as a preliminary to making a decision about a specific vocation. The prevocational training is carried out by the occupational therapist, and vocational guidance is provided by the vocational counselor in consultation with the physician. Provision can then be made for vocational training in a desired occupation.

Vocational guidance, prevocational and vocational training are available for all patients who have the capacity for such objectives and activities. Every patient, including those severely disabled by paralysis in upper as well as lower extremities, is carefully evaluated and his activities assessed for any possible practical vocational goal. The possibilities for further recovery of function by treatment are not overlooked in evaluating the patient's future possibilities for some type of employment. Mental capacity, education, drive, and emotional stability must also be included in this evaluation. In progressive neurological conditions the predictable future course of the disease is also taken into account. The actual employment opportunities which would be available to this handicapped individual in his home community or wherever he chose to live, as well as short and long term economic and social trends, must be taken into consideration in a realistic approach to vocational guidance and training of the physically handicapped for useful employment.

O-TEASERS

Question — What is the technical name for white blood cells and what is their purpose in the blood stream?

Answer—

Leukocytes. They engulf bacteria and foreign matter as in the case of infection.

Question—What is endocrinology?

Answer—

Science of glandular secretions and the sympathetic nervous system.

Question—By what are the secretions from the ductless glands known?

Answer—

Hormones.

EVENTS CALENDAR

April 14-17, 1950

Mid-year meeting of the Board of Management of the American Occupational Therapy Association, French Lick Springs Hotel, French Lick, Indiana.

October 4-12, 1950

International Congress of Psychiatry, Paris, France.

October 14-16, 1950

House of Delegates, Board of Management, and Committee meetings of American Occupaional Therapy Association, Hotel Colorado, Glenwood Springs, Colorado.

October 17-19, 1950

Convention of American Occupational Therapy Association, Hotel Colorado, Glenwood Springs, Colorado.

October 20-21, 1950

Institute of American Occupational Therapy Association, Hotel Colorado, Glenwood Springs, Colorado.

The Challenge of Traumatic Neurosis to Rehabilitation*

SIMON S. OLSHANSKY, A.M.

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Boston, Massachusetts

In rehabilitation work the counselor not infrequently encounters a client suffering from a traumatic neurosis. Just what is such a neurosis? How does it differ from malingering? What should be the counselor's attitude toward the neurotic client? And finally what contribution can the counselor make toward restoring the client to the status of full employment?

Interestingly enough traumatic neurosis has a long history, and is often referred to by such terms as compensation neurosis, accident neurosis, justice[1] neurosis, and litigation neurosis. In the late nineteenth century such expressions as railway[2] spine and railway brain were common since so many neuroses followed railroad accidents.

Terminology aside, a traumatic neurosis is considered to be a neurosis which develops after an accident. Though the neurosis does follow the accident, it may not be the necessary cause of it. A time sequence should not be mistaken for a casual sequence. Characteristic[3] symptoms are, besides conversion hysterical signs, depressive moods, irritability, emotionality, hypochondriac ideas, lack of will power, and a feeling of incapacity to work and of being invalided[4]. These symptoms quite clearly indicate that the client has taken "flight into illness" because he sees a certain "advantage in illness"[5].

What then is behind the traumatic neurosis?

First of course is compensation. Negatively this is proved by the fact that athletes[6] rarely suffer traumatic neuroses despite the severities of their injuries. Similarly people injured by earthquakes and other natural disasters knowing that they have no actionable claims against anyone very infrequently acquire a neurosis. An interesting question which may be raised at this point is, to what degree does a traumatic neurosis express the zeitgeist of our business culture: The deep-seated idea of getting something for nothing?[7]

Second, the client may be seeking an escape from dreary work;[8] he may desire to spite someone; or he may want to punish his wife or employer.

Third, the client may become anxious. He may ask himself[9]: What is to become of me? Can I ever again be well and fit for work? Who is to provide for my wife and children?

Fourth, a client may in the event, say, of an arm injury, feel his virility[10] threatened, and react with much anxiety. Possibly such an injury may even arouse castration fears.

These predisposing conditions are by no means exhaustive. For example it has been found that[11] injuries suffered by workers on temporary jobs are more likely to develop a traumatic neurosis than regular workers. Sometimes clients are motivated by a desire to get even, thus the German idea of justice neurosis. Possibly some clients are easily susceptible because of a lack of pivotal values, and because of a feeling of isolation and alienation. People dedicated to a common purpose do not have the need of a neurosis[12]. In any case, from the above, we can get an idea of forces operative in the production of a neurosis.

How does one distinguish a sufferer of a traumatic neurosis from a malingerer? In terms of psychodynamics a neurosis grows out of unconscious conflicts; in a malingerer[13] all acts and symptoms are conscious, contrived, and calculated to produce a pre-determined end. For purposes of rehabilitation the counselor should not undertake at any time to make the determination: that is the responsibility of a psychiatrist. In short, the counselor should assume, unless advised to the contrary by a psychiatrist, that the client is genuinely ill.

Because the client is genuinely ill the counselor works with sympathy and understanding, and *without suspicion.* It must be underlined that symptoms are painful even though they are psychogenic. Furthermore, the counselor should not permit moral judgment[14] to obtrude, and consider the client a faker, though an unconscious one. This does not mean we are not to evaluate a client's pre-traumatic personality. Far from it. Unless we do, we cannot successfully work out a vocational plan. The belief that everything was normal until the accident is at best only a half truth. The counselor must look under the bushel of so-called normality. .

Now we come to the crucial stage. How do we get the client back to work and normal functioning?

First, we must accept as an operative principle that most workmen who develop traumatic neurosis can be returned to work[15].

*The above conclusions are those of the counselor and not to be considered an expression of the views of the Division of Vocational Rehabilitation.

Second, we must *know* the worker, and his family. Dr. Foster Kennedy[16] states that ". . . in examining a neurotic after an accident, don't only consider the accident and the man before you, but what kind of a wife has he? Is there a mortgage on his house? Is he in debt? How much savings has he? Are his children ill?" In only this way can we understand the client's underlying needs.

Third, everything possible must be done to dissipate the sense of insecurity and frustration[17]. In this regard the counselor can play a decisive part in both *hastening* and *preparing* the client's return to his old job, and, where necessary, in providing retraining and/or placement for a new job. We can forge the hook upon which the client can hang his renewed hopes. Without renewed and realistic hope failure is certain. "Whenever this external or accidental advantage through illness is at all pronounced, and no substitute for it can be found in reality. You need not look forward very hopefully to influencing the neurosis by your therapy[18]". That in short is the counselor's ultimate responsibility: To demonstrate to the client that the reconstructed reality situation can be more sustaining and satisfying than any escape from life.

Incidentally, in this paper, I did not discuss the operation of Workmen's Compensation. This is not to suggest that it is unimportant. On the contrary, it is of utmost importance but since the rehabilitation worker has no control in the matter such discussion was omitted. In passing it is to be noted that almost all the writers referred to in this paper believe that settlement should be quick and with a minimum of litigation; that the client should undergo early examination and prompt treatment; that settlement should be final and by lump sum award; and that the client's illness should be accepted in good faith unless patient malingering is involved.

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12. cf. R. D. Gillespie, *Psychological Effects of War on Citizen and Soldier.* W. W. Norton, N.Y., 1942, chps. 3, 6, and 7.
13. For a good description of a malingerer, see Norman Mailer, *The Naked and the Dead,* Rinehart & Co., N.Y., 1948, pp. 353-367. Also, cf. Menninger, op. cit. pp. 286-296.
14. Menninger, op. cit. p. 288. ". . . To decide as to the morality of the illness has never been the physician's function." Of course this applies to the rehabilitation worker.
15. Hubert W. Smith and Harry C. Solomon, *Traumatic Neurosis in Court.* Annals of Internal Medicine, 21:367, 1944.
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Editor's Note: Occupational therapy is interested in working with the vocational counselor for the fullest adjustment of the patient with a traumatic neurosis. The growing understanding of emotional disturbance in relation to vocational readjustment fortells an even greater interrelationship between these two professional services. When performance is medically prescribed as part of the treatment program selected activity not only develops the injured part but puts the whole patient to work in a simulated work program. Performance can be used to help establish or point out the area through which a man derives satisfaction in reality and through which he might work out some of his neurotic fears or disturbances. In this way occupational therapy serves as the transition ground between hospital care and job performance. The occupational therapist's training in the psychiatric field and interest in the patient's pretraumatic personality equip her to conduct a work performance laboratory under medical direction to help resolve emotional conflict through performance. Through observation and trial performance the occupational therapist accumulates in her record much material of value to the rehabilitation counselor. This should be made more readily available to him through inter professional conferences and correspondence.

Paraplegic Veterans Can Work*

JAMES C. COBLE*

There was perhaps no group of patients in the military hospitals during and following the war whose care required more thought and skill than the paraplegic patient. Only a few survived World War I, and the fact that the vast majority survived World War II represented one of the outstanding medical achievements. Shortly after VJ day there were fourteen hundred of these individuals in Army General Hospitals who had partial or complete motor paralysis of the lower part of the body.[1] This number represented about seventy-five per cent of all paraplegic patients who had been admitted to the general hospitals during World War II. The other twenty-five per cent had been discharged to their homes or transferred to the Veterans Administration prior to that date. It has been estimated that each World War I veteran who has been cared for in a hospital since that war has cost the government $40,000.00.[2] The Baruch Committee on Physical Medicine in 1944 examined problems to be solved in medical rehabilitation and found for every dollar spent for rehabilitation forty-seven dollars was returned to society.[3] It would seem that these figures speak for themselves to anyone who might wish to weigh the care of paraplegic patients in dollars alone. The objective of those responsible for the care of the paraplegic patient is something more than saving money.

It has been said that the aim of the rehabilitation of paraplegic veterans according to generally accepted principles at the present time is to achieve the maximum function and adjustment of the individual and to prepare him physically, mentally, socially and vocationally for the fullest possible life compatible with his abilities and disabilities.[4] The social worker plays no small part in this process. The first essential in the Veterans Administration Social Service program has been stated as that of helping the disabled person to utilize all those resources which will enable him to achieve his maximum rehabilitation. The second essential is the recognition of the existence of freedom on his part to use the wide range of medical and technical services available to him within and outside the hospital and help him integrate them to his advantage in reaching his own goal.[5]

There has been much concern about paraplegics walking again, with medical and other effort focused on this objective. Perhaps another slogan, "They shall work again", should be emphasized more at the present stage of the rehabilitation process. Although much attention has been directed toward the training and retraining aspects of the rehabilitation process, little has been done to find out what work adjustment the paraplegic veteran has achieved after leaving the hospital. It is this area that is the subject of this inquiry. Specifically this study undertook to learn about the work adjustment of six paraplegic veterans who had been discharged as able to work after having achieved maximum hospital benefits. Were they employed for pay? How much time did they work? How much did they earn? What satisfactions were a part of this work? What problems were involved in work adjustment for these veterans? The foregoing constitute some of the questions to which we sought answers in order to learn about the work adjustment of paraplegic veterans.

The six paraplegic veterans selected for this study were, with one exception, former patients of Birmingham Veterans Administration Hospital, Van Nuys, California. The one exception had been known for a brief period of time to the out-patient department of the hospital. The case study method was utilized in this study, and personal interviews with the veterans constituted the basic source of material. Each interview was preceded by a preliminary contact during which a brief explanation of the purpose of the interview was made and a future appointment arranged. In evaluating the significance of the material procured, it was necessary to arrive at some standard for weighing the work adjustment findings. The standard forty-hour work week was used to evaluate the time spent on the job in paid employment. Each veteran's wages were compared with the local standard wage for comparable work as shown by California Labor Statistics bulletins. The wages of each employed veteran were also related to a standard budget for a family of their respective size in order to determine whether or not wages from paid employment met their family needs. The budgetary standard used was based upon the latest material available from the United States Bureau of Labor Statistics.

Prior to each individual interview a thorough knowledge of the physical condition of the veteran was acquired from his medical chart and examined in the light of our general understanding of paraplegia. Medically, paraplegia means the complete or partial motor paralysis of the lower extremities of the body. In these cord injuries there is complete or partial loss of sensation to light touch, pain, heat, cold, vibration and two-point discrimination. At the same time, the internal organs, such as the bladder

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*Mr. Coble is a Social Worker in the Veterans Administration Mental Hygiene Clinic, San Diego, California. The article presented represents a part of research for a thesis presented to the Graduate School of Social Work, University of Southern California, June, 1948.

and bowels, become paralytic, and the skin, due to lack of sensation and disturbed blood circulation, becomes liable to pressure sores.[6] Easy susceptibility to illness is a usual characteristic of the paraplegic patient. During World War I, many died of spinal shock, urinary and pulmonary infections. Many of those who survived were confined to bed with large pressure sores and chronic infections that slowly lowered their resistance. With the introduction of sulfanilamides and antibiotics, new surgical, medical and neurosurgical techniques, and better knowledge of nutrition, the entire outlook for the paraplegic patient changed. From the Assistant Medical Director of the Veterans Administration comes the prophecy that the present paraplegic population can have a near-normal life expectancy.[7]

The physical condition of the paraplegic veterans included in this study varied with each individual studied although their general situation conformed with the usual paraplegic pattern. All the cases had been discharged with maximum hospital benefits. Of the six cases studied, four had been readmitted for further hospital care. Although the medical records showed that all were able to walk with the use of braces and crutches, only one was actually walking at the time of the interview. All except one used their wheelchairs as their means of locomotion. In three cases there was good acquired bladder and bowel regulation with few involuntary movements. In the other three there was only partially successful regulation. Although no patient with complete paraplegia can ever regain control of bladder and bowels, it is possible through retraining, observation of bladder capacities, and the application of light pressure in the bladder area, to stimulate the passage of urine at scheduled intervals.

It is believed that the major motivating factors to work are financial gains to one's self and family and personal gains that contribute to the development of one's personality. A prerequisite of successful work adjustment is a desire to work commensurate with one's ability. The attitude of all individuals toward becoming vocationally independent is conditioned by numerous complex desires and motivations, as well as limited by experience and physical and mental ability. Some of these factors were examined in an analysis of the cases studied. The employment of these veterans was divided into three groups. The first group was composed of those individuals who were employed and received pay from their employers for their services. In it were placed two paraplegic veterans of World War II who were employed full time. One had been working for a period of nineteen months. They had good work attendance records and were able to conform to the standard forty-hour week. The first group is well represented by the Case of Mr. A.

Mr. A, a twenty-four year old veteran of World War II, was injured by a machine-gun bullet in the European Theater in April 1945. The diagnosis at the time of transfer to the Veterans Administration on April 1, 1946, was myelitis, acute, traumatic, complete, with paralysis of all nerves inferior to the eleventh dorsal vertebra and severe sacral decubitus. During his period of hospitalization this veteran made many accomplishments in the use of his body. He was fitted with braces which he used very well with crutches. Mr. A was discharged from the hospital with maximum hospital benefits in September 1946 and has had no subsequent readmissions. The pressure sore had been cleared up and the veteran had attained sufficient bowel and bladder control to enable him to work an eight hour day without undue inconvenience. At the time of the interview, he had been employed nineteen months. He did not use his braces on the job but performed his work in his wheelchair.

Prior to his thirty-eight months of military service, Mr. A had been a forester for five months and a stock clerk for a period of nine months. He was very much interested in forestry and had received some college training in this field. While a patient in the hospital this veteran had been tested by the Advisement Section of the Rehabilitation and Training Division and a training objective of architect had been approved. He had done some woodcarving, leather work and jewelry repair but felt that these were avocational and in no way could be considered a vocational training course. Mr. A had completed two years of college work before his injury but had received no formal training since his hospitalization.

Following his discharge from the hospital he had received a Civil Service appointment in a sub-professional position as a journeyman orthopedic mechanic. His salary was $2,644.00 a year. This work has no similarity to his prior work experience and is not related to his training objective. Mr. A was also engaged in the designing and planning of his own home. He began work immediately following his discharge from the hospital. His was an immediate attempt at work adjustment. His hours of work were eight a day, five days a week or a total of forty hours per week. During the period from September, 1946, to June, 1947, this veteran had a perfect attendance record. He felt that he had to prove that paraplegics could establish as good or better work records than the physically able. The feeling that he was helping other paraplegic veterans by proving this point was strong in the motivating factors.

Mr. A stated that he took this job because he wanted to do something and it seemed to be the only thing open at the time. He had been urged by his doctor to find something to do. He really did not have to work as he was single and had no dependents. His disability compensation was $360.00 a month. The veteran did not believe that the liberal amount of his disability compensation would ever influence his efforts but thought that is was a factor that

influenced the work attitude of some of the other paraplegic veterans. He felt that the amount of family responsibility and the resulting financial pressures were important elements in their work motivation. Since he had saved several thousand dollars from his compensation and earnings, the security factor as related to financial gain to himself might be important as well as the personal satisfaction gained from proving that he could do the job. He secured the job mostly on his own initiative and persistence. Although Mr. A could ambulate with the use of braces and crutches, he did not attempt to use them on the job for fear of falling into the machinery. This veteran drove his own automobile. His social history indicated that he was an aggressive, determined individual with great strivings to become independent.

The second group was made up of paraplegic veterans who were receiving vocational training either as full time students in an institution or as on-the-job trainees in a workshop where no pay was received from an employer. This class had one veteran for whom special arrangements had been made to receive on-the-job training in a hospital workshop and retain his subsistance allowance under the veterans training program.

Mr. B, a twenty-five year old veteran of World War II, sustained a shrapnel wound in the European Theater, in November 1944. The level of the injury was the eighth dorsal vertebra with complete paralysis of all parts below that level. While hospitalized this veteran learned to ambulate with the aid of long leg braces together with a pelvic band and crutches. He was discharged with maximum hospital benefits in April, 1947. At this time the veteran had no normal use of his lower extremities and lacked normal bladder and bowel regulation. While a patient, he had repeated operations for the closure of pressure sores. Following his first discharge, there were two subsequent readmissions. He was on leave from the hospital at the time he was interviewed. Mr. B had been readmitted the first time because of the breakdown of a sacral pressure sore and the second time because of abdominal spasms and difficulty in passing urine. At the time of the interview, he complained of almost constant "root" pains in his lower extremities and occasional spasms of the stomach muscles. The veteran was not walking at the time. He moved about and performed his work in his wheelchair.

Mr. B's last job before entering the Service had been as a truck driver. He had been employed for a period of three years. The duties of this employment included the repairing of his vehicle which necessitated his being a qualified mechanic. Mr. B liked this work and had not completely accepted the fact that he would never be able to drive a truck again. His ambition had been to become a bus driver. This veteran left school and enrolled in the Civilian Conservation Corps when he was seventeen. He later held numerous jobs such as dynamite plant work, carpenter work, and as a shipyard laborer, but never worked at any of these for as much as a year at a time. As a patient he had been resistant to a discussion of vocational training. He did not know what he really wanted to do.

At the time he was interviewed, Mr. B had been receiving on-the-job training in woodwork for a period of three weeks. His primary training objective had been determined by the Advisement Section as a radio equipment assembler with simple mechanical work as a secondary objective. He had worked for a brief period in a machine shop but did not like this work. Mr. B thought that he might like this kind of work and had wondered about the possibility of establishing a wood workshop of his own. No pay was received for this work but the veteran had been awarded $105.00 per month subsistence allowance from the government while pursuing this training. The reason for engaging in this activity was expressed in his statement: "That is really not what I wanted to do but the doctor thought that I should have something to occupy my mind."

Mr. B worked fifty per cent of a normal work week. The veteran's four hour tour of duty was broken with intervening rest periods because he felt that he could not work a four hour shift without interruption. Although the veteran was working a number of hours equal to one-half of a standard work week, he would have difficulty adjusting in the usual industrial setting where production is the primary objective and broken, part-time shifts are discouraged. Even though Mr. B's physical condition appeared to be the main deterrent to full gainful employment, there were other factors also. He had a pre-war record of frequent changes of jobs of short duration. His educational level was low. Mr. B did not feel that his $360.00 a month disability compensation affected his attitude toward work, although this amount far exceeded his highest previous earnings. He had only one dependent, his wife, who was employed. Since he was financially secure and seemed to be satisfied with his present income, he appeared to have no strong motivation to work for financial gain. It would seem valid to classify his present work endeavor as effort for personal gain. As expressed by the veteran, it represented "something to occupy my mind." In working, he was also following his doctor's advice to find something to do.

The third group was composed of veterans who at the time of the interview were neither gainfully employed nor receiving vocational training. In studying this group, attention was focused on the reasons why the veteran was neither working nor in training. There were three veterans in this group. Although no one of these cases could be said to be representative of the group, the case of Mr. C presents the situation as found in one particular case.

Mr. C, a thirty year old veteran of World War II,

was wounded in the European Theater by shell fragments in November 1944. The level of his injury was the twelfth dorsal vertebra resulting in an incomplete compound fracture. He was discharged from the hospital in October 1946 with a diagnosis of myelitis, tranverse, with paralysis of both lower extremities and the loss of bowel and bladder sphincter control. He was readmitted in July 1947 for bladder education and testing for capacity because of constant dribbling. At the time of the second discharge in September 1947 there was some improvement in bladder regulation and he was able to ambulate with the aid of long braces and crutches. However, at the time Mr. C was interviewed, his wheelchair was his most usual way of getting around.

Mr. C had not been employed since his original discharge from the hospital. In September of the same year, while still a patient, he had enrolled in a business college where he pursued a training objective of junior business executive. He had completed two quarters when he had to return to the hospital for further treatment. His school records showed that he had carried a full schedule and his grades were superior. His attendance record was good. The school was conveniently equipped for paraplegic patients and his driving to and from classes presented no problem. His car was equipped to accommodate his incapacities.

Mr. C's previous education consisted of high school and three years part time business training. Advisement records showed superior intelligence and a very high aptitude in the clerical and business field. He had more work experience than any other member of the group studied, a total of six and one-half years. For four years he had been a salesman and for two and one-half years he was a route supervisor for a trucking company. Although he had driven a truck, most of his experience had been in a clerical and managerial capacity. This veteran received no vocational training while a patient in the hospital the second time. He planned no further school work in the near future and was contemplating entering into a partnership dairy business with a friend. His duties would include the office work, purchasing and a share of the management. This occupation would represent no great change from his prior occupation.

Mr. C had a strong drive to become self-supporting which seemed to be reinforced by some fear of insecurity. He had experienced unemployment during the depression of the '30's and felt that should a similar state of economic affairs be repeated, not a single paraplegic veteran would be able to get a job. Although he recognized that the self-employed would experience business slumps, he thought their security would be greater. This veteran indicated that he would rely heavily upon his disability compensation to enable him to get started in business and to tide him over business slumps. He found the $360.00 a month disability compensation adequate to meet his present needs but did not feel that the adequacy in the amount affected in any way his desire to work. It enabled him to plan with more certainty and independence. At the time of the interview, much of his time was occupied by driving to the hospital for medical care and working with his hobbies. Mr. C had two dependents.

All of the paraplegic veterans studied had had work experience prior to their injury and the majority had held more than one job. Their total work experience ranged from fifteen months to six and one-half years. Two veterans were mechanics before entering the service. There was one truck driver, one salesman and one stock clerk. The World War I veteran had been employed as a lineman in the construction field before he entered the peace-time military service. Only one veteran was able to continue in his former field and he had minor adjustments to make in his training objective. Formal education ranged from the tenth grade to two years college and only two had attended school since discharge from the hospital.

Considering all the classes, one-third of the cases were employed for a number of hours of work which compared favorably with the standard forty hour work week. In considering wages, both the amount paid by the employer and subsistence benefits paid by the government were included. The standard wage used in the study was the weekly wage for complete employment in the Los Angeles area as shown by the California Division of Labor Statistics in April, 1948.[8] In using the standard wage scales, the wages of all cases working fell short of the standard. The monthly wages were compared with the standard budgetary requirements for families of their respective sizes. The wages of the two veterans who were employed full time exceeded the standard budget for June, 1947.[9] One veteran who worked twenty hours a week earned sixty per cent of his budget. Since three veterans received no wages, only one-third of the group were earning a sufficient amount to meet their budgetary needs.

Personal satisfaction appeared to be the primary reason for working in the three cases or receiving on-the-job training. The three cases not working were unemployed primarily because of physical reasons. Two of them had work objectives and work plans. All of the unemployed veterans utilized time for hobbies and other non-paid work. In five out of six cases studied, attitudes toward the adequacy of their $360.00 a month disability compensation were not admitted reasons affecting their work adjustment. Its main effect appeared to be in that it might have delayed the acceptance of work that was not to their liking or for which they were not prepared. In other words, the security offered in the disability compensation permitted more selection of the field of endeavor and enabled more adequate training for a job.

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Experience In The Use of Music As An Adjunct In The Treatment of Patients With Infectious Hepatitis

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and
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Experiences related in this article were encountered while the authors were residing in Bayreuth, Germany, a city of northern Bavaria. Located in this city was an Army Station Hospital which was designated as the Hepatitis Research Center of the European Theater of Operations. This unit and its work was under the auspices of the Army Epidemiological Board and the Commission on Virus and Rickettsial Diseases sponsored by the Surgeon General, U. S. Army. The patients treated at this hospital were derived from troops stationed in France, Germany and Austria. By directive, all personnel who were admitted to Army hospitals and diagnosed as having signs and symptoms of hepatic disease were sent to this hospital for observation and treatment. During the period of twelve months from September, 1947, to September, 1948, some 3,000 patients had been diagnosed as having acute infectious hepatitis, usually with varying stages of jaundice.

It is not the purpose of this article to present the medical aspects of this disease, but rather to relate the functions of the social services at the hospital which were maintained through the facilities of the American Red Cross.

To obtain a better appreciation of the patients' background as a whole, it must be stated at the outset that the average length of the stay of each patient at the hospital was about seven weeks. This period of time was necessitated by the fact that a soldier, and particularly one stationed in an overseas area, must live either in a hospital or in the quarters on the post to which he has been assigned. Therefore, unless an individual is physically able to carry on full military duty, he cannot be discharged from the hospital. For this reason, patients were usually admitted and placed on bed rest until their jaundice had disappeared, after which time they became ambulatory and had access to the Red Cross and other facilities provided by the hospital. Recreational facilities were limited since their physical condition was such that exercise, generally, was contraindicated.

As a rule, bed patients required little diversion from their surroundings, inasmuch as they were usually too ill to desire other than medical treatment. On the other hand, the ambulatory patients were quite the opposite and were most demanding in their desire for diversion. To meet this situation the Red Cross staff was taxed to the utmost in maintaining a program of activities which would be of interest to all. In general, these activities included handicraft and shop work of all kinds; discussion groups and conferences, including conferences with German personnel; language courses; library facilities; games and parties; and a variety of musical activities[1].

The senior author was a member of the hospital medical staff; the junior author, while not a staff member, served as an adjunct and volunteer in many of the activities performed by the Red Cross.

As has been previously stated; the ambulatory patients frequently presented significant departure from what one would consider a normal behavior pattern. On many occasions patients were found to have alcohol in their possession, in the form of the famous German potato "Schnapps," although the possession and consumption of alcohol was forbidden to patients with liver damage. When "Schnapps" was not available, some patients were observed to be drinking "Mennen's Shaving Lotion." These patients were subjected to court-martial but still this did not deter others from drinking.

Another rather unusual perversion was detected one day when a group of patients were noted, by a nurse, to be continually requesting aspirins over a period of several hours. Similar episodes had occurred on other occasions. Investigation by the doctor in charge disclosed that the patients had been pulverizing the tablets and mixing the powder with tobacco to make cigarettes.

In addition, there were many instances of patients leaving the hospital without permission, occasionally going into town in their bathrobes and pajamas.

These are probably among the outstanding incidents that occurred and certainly do not speak for a normal state of mind. A review of the histories of these patients did not disclose any mental deficiency or marked personality or behavior defects prior to entry into the hospital, and since such changes are not characteristic of hepatitis, it must be concluded that a prolonged and confining hospital stay played a

considerable part in the reaction which these patients showed. Thus it may be seen that any form of diversion would be of great benefit not only to those that showed outward deviation from the normal but also to those who appeared to be either depressed or anxious to lead a more normal existence. Fultz believes that music plays a definite role in rehabilitating all types of patients[2].

In our experience, an active participation in the practice of music[3] was one of the most important means of accomplishing the necessary diversion. "By substituting wholesome feelings for morbid ones, music exercises a power of diversion."[4] In our particular instance music became more than a recreational factor, rather it became a definite adjunct in therapy.

The Red Cross workers planned each week a program of entertainment built around some particular theme, complete with hand painted posters in the main Red Cross room as well as mimeographed posters in each ward, to gain interest. These programs always included a planned "listening hour" during which time the "music room" was always crowded. The record library was adequate and provided good variety for a record program. However, the phonograph was also in constant use outside of the planned programs, so that anything from "boogie woogie to Brahms" could be heard at any time of the day!

There were two pianos available to the patients—professionals or otherwise—and a number of fretted instruments, predominantly guitars. Although there were no teachers available, the pianos were in constant use. An occasional patient had had musical training and was able to play both for his own satisfaction and for the satisfaction of other patients. On the other hand, there were many other patients without formal training who, nevertheless, delighted in "composing". "The aim is to satisfy the cravings of the patient for musical experience rather than to foster 'good music' primarily."[2]

This ability of some of the more talented patients led to an original "drama" complete with music, fittingly entitled "Hepatitis Blues." A number of the ambulatory patients, bored with hospital life, set to work to produce a show. The finished product was as good an exhibition as many of those the USO talent troups had presented. The junior author appeared as "guest artist" to sing light musical comedy songs and appeared as the only genuine woman on the program—all other "feminine characters" were portrayed by male patients. With the help of the Red Cross staff the show was complete down to a "chorus line" of beautiful girls bedecked with crepe paper costumes! The music presented was not original, nor did it come from "the Masters,"[2] but is was appreciated. One shy lad[2] who almost refused to appear at the last moment, covered himself with glory as he sang "Cigaretts, Whiskey and Wild, Wild Women," accompanied by the "string ensemble" of piano, string bass, guitar and trombone. The entire "drama" was, in general, a "take-off" on the routine of hospital life, plus interspersed musical attractions. Since the patients all had hospital routine in common, the comedy was fully understood and appreciated. Wittenburg states that the main objective of drama and music is "the use of relationship as a prophylactic and therapeutic method."[5]

Occasionally, entertainment was brought to the hospital in the form of USO and Allied shows. The USO groups were composed of American entertainers, principally singers, dancers, comedians and instrumentalists whose performances were modeled along the lines of vaudeville. Allied shows consisted of performers of other nations, from countries who were allies of the United States during the War—principally French and English. Their entertainment was very similar to the American shows; it was, in fact, probably modeled after American entertainment for the benefit of soldiers' appreciation. Needless to say, this was all light entertainment and was invariably enjoyed by the patients.

Group singing was another important medium employed at the hospital. The patients enjoyed it particularly at special times of the year, such as the Christmas season. We had several sessions of carol singing into which otherwise retiring patients entered eagerly.[2] Caroling seemed to help them remember Christmas at home and relieve some of the loneliness of being far away in a distant country. The junior author led carol singing and discovered that many of the patients were eager to sing solos. Solo singing evidently gave them an egoistic boost, gave them a chance to excel in their otherwise group existence.

The Bayreuth Symphony Orchestra was very active with concerts during the year. However, only military personnel were able to attend since the patients were not allowed off the hospital grounds. Only one exception was made to this rule. The junior author appeared as soloist with the Bayreuth Symphony and for that concert special permission was given to about 120 ambulatory patients to attend. Through the Red Cross staff, these patients were transported to the concert in U.S. Army trucks and returned immediately at the close of the program.

The commanding officer of the hospital was extremely interested in the Bayreuth Symphony and in order that all the patients might have an opportunity to hear the group, brought the Orchestra to the hospital for one concert. This concert was played from the band-shell on the premises of the hospital. The program for this concert was composed of lighter, more popular numbers that would interest the greatest number of listeners. It consisted of the "William Tell Overture," "Rosenkavalier Waltzes," "Strauss Waltzes," and other concert pieces of similar nature that would please a cross section of personalities involved. The finale was the soldiers' favorite: "Stars and Stripes Forever".

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A Sociological Approach To Music And Behavior

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How enticing, how difficult, how immense is our topic! One thinks of a discourse by a Plato or a Tolstoy, a Hegel or a Schopenhauer, a Dewey or a Cassirir, even a Hitler or a Lenin. Yet the gist of this meeting in these germ-free quarters implies, I take it, that we must forego the embracive warmth of aesthetic absolutism and romantic aberration. A certain Mr. Hartwig, one gathers, would not do credit to this panel with his statement in 1919 that music is "the spark which kindles those higher impulses in man which, sympathetically fostered, develops into the big noble qualities."[1]

Nonetheless, I hesitate to feel that the choice lies between the one extreme of aesthetic theory with its vast horizons and *kulturweltanschauung* on the one hand, and on the other, the present preoccupation with rigid and minute statistical measurements. There is, perhaps, a middle ground, an area which, like a bridge from atom to quantum, may reconcile microscopic musical mood studies with macroscopic art speculation. This middle ground consists in social analysis; to develop this thesis may be the proper role here for the lonely sociologist.

The truth is that contemporary sociologists have largely overlooked the arts and music as areas for empirical research. No one has taken up the contributions of Lalo or Max Weber and carried them further. A few, such as Sorokin, have treated of the arts as partial evidence for expansive sociocultural schemata; some musicologists and historians, like Paul Lang, Curt Sachs, and Alfred Einstein have drawn on social sciences for conceptual framework. We have various excellent studies on attitudes toward music as the recent survey of the American Music Conference,[2] and studies of radio listener content by Paul Lazarsfeld and his groups.[3] A comprehensive sociological treatment of the relation of the musical value to the huge number of conceivable social patterns and situations is yet to be written. Its formulation would profit from the special types of researches reported here, and from such cross-disciplines as so-called "social psychiatry".[4] It would apply our techniques with sample polling and attitude scales, as well as our insights into group dynamics.

Sociology deals properly only with social relationships, and therefore begins with normative action patterns. It is interested in music quite indirectly, only inasmuch as music becomes a value or interest around which people act jointly. From this view, the question, how does music influence behavior, suggests a serious oversimplification; it had better be put into two: first, what are the situations in which the musical value affects attitudes and social relationships; second, given an understanding of the process, can similar situations or attitudes be simulated, recalled, or created? Our function, as analysis and generalizers, is to study the social process; that of the therapist, the movie producer, the orchestra conductor, the radio program director, the school teacher, the psychodrama director, and other educators and distributors, is to apply these principles in setting up and predicting new situations. There are obviously great areas of life in which we have long ago known that music functions effectively. For example, music in the church, music with a marching platoon, music to set the social atmosphere for a political rally, a beer bust, or a conference of strangers. In each situation mentioned, predictions are involved, so that one can with almost complete assurance posit the kind of audience Toscanini would attract at Orchestra Hall compared to Spike Jones, and how each will act. From such obvious situations there is much to be observed which can be applied to controlled experimental groups. The reason that much of the discussion and research in therapy is in confusion may be that it generally has failed to relate the mental patient to his past and present social patterns in terms of obvious, everyday situations. I should now like to channel my remarks in terms of five hypotheses.

Hypothesis I. *The influence of music on behavior cannot be measured with our present knowledge unless an object behavior-unit is available.* This is the strength of research on music in factories.

Hypothesis II. *Music, as one variable factor among many other variables, cannot be evaluated for influence on the basis of simple correlations.* Consider a group of children in the Music School Settlement of New York's lower East Side. They partake in the usual activities—orchestras, choruses, classes, concerts. Olga Samaroff reports the astounding fact that not one of these youngsters in the past 43 years has been called before a judge for juvenile crime.[5] Assume, now, that we perform an *ex post facto* study similar to that made famous by Christianson and Chapin.[6] Comparing these music students with an equal number of Dead End Kids, the factor of music is found

to be precisely the variable of significance in the two behavior patterns. The question then arises, is this factor something in the inherent quality of music, in the development of specific attitudes, or did it arise from organized participation through use of the musical value, pride of group membership, strength of leadership, control by anticipation of prospective audiences approbation, and so on.

Hypothesis III. *The analysis of music as influence is meaningful only in a framework of dynamic social relationships.* Attitude studies are a depiction of static snap-shots, not dynamic situations. Perhaps the more precise the study, the further it becomes removed from reality. The concept of an attitude as a tendency to action has proven to be an over-simplification. Our problem is not only to get moods or attitudes but to manipulate this information in terms of action. I am dubious that this bridge has been crossed as yet. There is no implication here that these specific studies are useless; they are indeed valuable, but only when provided with a dynamic framework.

Hypothesis IV. *Written or stated reactions to music reveal semantic culturally-conditioned replies, and are not necessarily conclusive.* As Doris Soibelman notes, "What has been attempted is, in fact, the measurement of a mood which is transient and personal, by a unit that is itself evanescent and intangible."[7]

Hypothesis V. *Three basic elements of group analysis are common values, communication and symbols, and structure.* Such analysis calls for observations of the interplay of the roles and statuses of performers, creators, listeners and other participants. We arrive in such analysis in a consideration of the many functions of music: such as group possession and symbol, relaxation, recreation, escape, economic commodity, propaganda by association, conspicuous consumption, and creative expression.

Close study of the hypotheses and their implications would suggest numerous research suggestions for even a specific area like therapy. Permit me to close by suggesting only one, a social analysis of the integrated roles and statuses of a mental hospital. Patients are more than organisms or case studies. What social patterns, cliques and reactions arise among patients, between patients and attendants, or even among the physicians? Combining this study with a knowledge of previous musical interests of patients, could music be utilized—either as a subjective meaning or a medium of activity groupings—to help arrange the ecological patterns of sleeping, eating and working? Can music serve as a mediating or linking factor between a patient undergoing shock treatment and his future outside environment? This overall type of social analysis has for 15 years proven effective in social analysis of industry by such men as Elton Mayo, Peter Drucker, Wilbert Moore, Robert Dubin, and William Whyte.

There is another side of the whole problem which is implicit in sociological analysis—not the affect of music on behavior, but music as a manifestation of behavior. But this is another speech. The subject becomes even more enticing, immense, and difficult!

NOTES

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Experience In The Use Of Music

(*Continued from page* 19)

In presenting the foregoing material, the authors have outlined the main features of a musical program in a hospital for patients suffering from what might be termed a chronic illness. Due to a lack of facilities and trained personnel, and due to the limitations of time on the part of the doctors, music in this instance could not be considered as a primary therapeutic measure,[4] but as an adjunct. However, from personal contact with the patients and from the experience of others on the staff, it was felt that the musical program played a definite part in building and maintaining the morale of patients during their illness. Altschuler states: "The physiological and psychological effect of music, its social, educational and esthetic attributes, place music into a rank no other therapy can measure."[6]

Certainly activities such as these can be heartily recommended to all institutions caring for bed-ridden or chronically ill patients and the time and expense involved for such programs cannot be measured against the enthusiasm, encouragement and happiness gained by these patients.

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NATIONALLY SPEAKING

From the President

Are you aware of the existing opportunities for further study in occupational therapy either for academic credit or to better fit you for your job? For many years occupational therapists have expressed the hope that specialized courses, particularly applicable to their field of service, might be made available to them.

During the last year two fine plans were offered, one by the University of Southern California, at Los Angeles, and the other at Georgia Warm Springs Foundation, Warm Springs, Georgia. These are offered again in 1950.

The 12 occupational therapists who availed themselves of the opportunity to take the course at the University of Southern California last summer have had nothing but high praise for its value. I can personally attest to the benefits derived by one member of my staff. It is paying dividends both to her and to our treatment program.

Most of us realize that Georgia Warm Springs is the "world recognized training center for professional workers in the treatment of the after effects of poliomyelitis". Is there one among us that does not feel the need for specialized training in this area?

You will be as amazed as I am to learn that these courses are not receiving enough applications to assure their continuance this year. Perhaps it is because you occupational therapists are timid and afraid you might not be accepted or haven't had time in your understaffed departments to duly consider the possibility of release from your positions, or the great advantage which would accrue to your department, consequently to your patients and to your hospital or clinic. It is believed that most of your superintendents or administrators would suffer the temporary inconvenience of your short absence if you explain to him the value of the increased knowledge you will acquire.

Your national office has worked diligently to obtain these opportunities for *you*. Don't let them down and particularly don't miss the chance to further equip yourself through this advance study. The subsequent benefits to you, your patients and your profession will be well worth your effort and any sacrifice necessary to your present employer.

The course at the University of Southern California conducted by the Occupational and Physical Therapy Departments includes intensive study in dissection anatomy, advanced kinesiology and the theory of applying occupational therapy in the treatment of the poliomyelitis patient.

The dates for the course are June 26 to August 4, 1950. Tuition will be $96.00 for the entire course (6 units @ $16.00 per unit). Maintenance during the six weeks costs approximately $150.00 if the student plans to live in one of the campus dormities.

Only those who are registered occupational therapists or eligible for registration, will be considered. The course gives graduate credit if the therapist has a Bachelor's degree; this however, is not a prerequisite.

The National Foundation for Infantile Paralysis offers scholarships for this course to eligible candidates in need of financial assistance in order to attend the course. Scholarships may cover tuition, room and board for the duration of the course and transportation to and from Los Angeles, California. Applicants must be citizens of the United States, registered occupational therapists, and have a minimum of two years clinical experience in the field of physical disabilities or one year with polio patients.

For information concerning course content, class and laboratory hours, etc., write to Professor Margaret S. Rood, O.T.R., Occupational Therapy Department, University of Southern California, Los Angeles 7, California.

Applications for scholarships should be made well in advance to the Professional Education Division of the National Foundation for Infantile Paralysis, 120 Broadway, New York 5, New York.

The course at Georgia Warm Springs is given four times a year and begins the first Monday of January, April, July and October. It is divided into two parts of three months each. All accepted students take Part I; a limited number may stay for Part II if requested.

There is no tuition for the course. Maintenance charges to cover room, board and laundry of uniforms are $60.00 per month. Scholarships for those who are eligible for the course but unable to finance it are available through the National Foundation for Infantile Paralysis. Scholarships cover maintenance charges and transportation to and from the training center.

The course is open to physical and occupational therapists and residents in physical medicine. All three groups receive the same instruction together. The first three months are devoted to the principle of muscle testing and muscle re-education, and to the principles and practices of occupational therapy as they apply to the early poliomyelitis patient. During the second three months, instructions concentrate on functional training and testing and again on the principles and practices of occupational therapy, this time as they apply to those patients receiving functional training. The occupational therapy student has an opportunity to do muscle testing and muscle re-education on selected patients in classes with the physical therapist. In addition, the course includes lectures on related subjects, such as scoliosis, ortho-

pedic surgery; observation of gait and crutch walking training; and training in the use of assistive and supportive apparatus.

Lucy Morse stated in a letter to the editor (AJOT, Vol. III, No. 5, p. 284) that "every occupational therapist who is working with physical injuries would find the opportunity afforded at Georgia Warm Springs Foundation basic for all their other work." If your specialization in occupational therapy is with this type of patient you should not continue to ignore this opportunity to obtain the type of training occupational therapists have long wanted. Here is your chance to become much more effective in your treatment of the patient and in training others to become better therapists.

For further information on the Georgia Warm Springs Foundation set-up we refer you to AJOT, Vol. II, No. 6, pages 353-355, "Featured Occupational Therapy Departments—Georgia Warm Springs Foundation", by Charlotte Steitz, and to Lucy Morse' previously mentioned letter to the editor.

For information on the course or for an application form, write to Dr. Robert L. Bennett, Assistant Medical Director, Physical Medicine, Georgia Warm Springs Foundation, Warm Springs, Georgia.

Application for a scholarship can be made at any time during the year to the Professional Education Division, National Foundation for Infantile Paralysis, 120 Broadway, New York 5, New York.

We urge you to apply as soon as possible in order that these outstanding opportunities for which we have worked so hard may not be discontinued.

All those who are working or planning to work with polio and other physical disability patients should find a way to take advantage of this opportunity for gaining greater knowledge and new concepts in the treatment of this type of patient. Those therapists who attended the course last year are finding it to be of great value in their work with patients and/or for training occupational therapy students.

Winifred C. Kahmann, O.T.R.
President

From the Executive Director

At the present time, WHO (World Health Organization) and UNESCO (United Nations Educational, Scientific and Cultural Organization) are establishing rehabilitation centers throughout the world. The only standards for the education of occupational therapists which these organizations can recommend are those of individual countries. A need has therefore been demonstrated for the establishment of standards in occupational therapy which would have worldwide application.

At the 1949 AOTA Convention held in Detroit, Miss Bell Greve, Secretary-General of the International Society for the Welfare of Cripples, presided at a luncheon sponsored by that Society for occupational therapists interested in the possibility of establishing an International Association of Occupational Therapists. Foreign consuls representing Argentina, Canada, Cuba, France, Great Britain, Italy, Norway, Panama, Peru, Poland, and Sweden attended the luncheon at which the Honorable James J. Hurley, Consul of Canada was Toastmaster. Student and graduate occupational therapists attending the luncheon represented Canada, England, Hawaii, India, Israel, the Philippines and Sweden. Both consular and occupational therapy representatives affirmed the need for and value of such an organization of occupational therapists in countries throughout the world.

Following the luncheon, National Office representatives met with Miss Greve for the purpose of discussing plans and procedures in establishing an International Association. Miss Greve's extensive experience in work of this type enabled her to outline for us a detailed program of organization. Since it is thought to be a subject of general interest to the membership it is reviewed briefly here.

An International Association of Occupational Therapists would stimulate interest and activity in this profession in all countries having membership in it, provide for the exchange of professional ideas, journals, literature, etc., and permit the interchange of personnel between countries. Standards for such an Association could be designed in such a way as to be acceptable to all member countries, and yet permit differences in educational requirements for admission and allow for variation in skills, treatment specialties and similar matters according to the demands of individual countries.

Since there are Occupational Therapy Associations in Australia, Canada, England, Israel, New Zealand, Scotland, and South Africa, these countries were suggested as the first to be contacted for their reaction to the establishment of such an organization. When the Association is formed, it should be affiliated with the World Health Organization and similar international groups engaged in social welfare and rehabilitation. As a model for organizational purposes, the constitution of the International Society for the Welfare of Cripples might be used.

Certain constitutional requirements would necessarily be established, the first of these concerning membership. *National* membership could be extended to those countries whose standards met the standards established by the International Association. *Individual* membership could be of two classes: a) professional members who would be qualified occupational therapists in their own country; and b) associate members — non-trained but interested persons. National membership fees would be determined on a proportional basis in accordance with the pop-

ulation of the member country. Individual membership might be available at a predetermined fee.

Control of the International Association would be by national groups only rather than by individuals. Each nation would hold one vote in international affairs regardless of its size. A President and Treasurer should be established as two essential offices on an elective basis, with a Vice-President provided for each continent holding membership. The Treasurer should probably be a United States citizen because of the difficulty in monetary exchange at the present time. A Board of Managers could also be formed which would be representative of one member from each country. Official languages of the Association might be Spanish, which is spoken in twenty-seven countries, English, and possibly German and French.

It was also suggested that the Association be housed at least temporarily in the United States. For this purpose, the American Occupational Therapy Association might provide office space which for some time might consist of no more than a file drawer and the use of the National Office as a permanent address.

Miss Greve stated that the International Society for the welfare of Cripples is holding a meeting in Sweden in 1951 and expressed the hope that the International Association of Occupational Therapists might be sufficiently developed by that time to hold its first meeting in conjunction with them.

The AOTA Board of Management considered the matter of an international organization at the annual meeting in August. It expressed sincere interest in the possibility of the formation of such an Association, indicated approval of the principle of the idea, and offered to take first steps with regard to effecting it. In this direction, the President was empowered to contact the Presidents of Occupational Therapy Associations in the countries named above with regard to their interest in an International Association. Subsequently, if response so warrants and feasible plans can be developed, a committee may be appointed for the purpose of drawing up a constitution and proceeding with other organizational matters.

In this day of international interests, organizations and activities, the formation of an International Association of Occupational Therapists would seem to merit our serious consideration. It is believed that other countries will also be interested and active in helping to realize the ideals and objectives of this proposal.

Wilma L. West, O.T.R.
Executive Director

From the Educational Field Secretary

We may say with pride that the educational standing of our profession has undergone rapid development during the past decade. Prior to that time, only one of the five schools then in existence granted a degree at the end of the academic training for occupational therapy; the other four granted diplomas only. In other words, only one was a part of an institution of higher learning. Today, all twenty-five courses are either part of a university or college, or are affiliated with such, and all twenty-five grant a degree.

In viewing other professions for women, we find that their development closely parallels our own. Thus, within the past ten years, the former two-year Normal School training of the teacher has been replaced by the four-year college course, and a degree is now a prerequisite for teaching. While in nursing the three-year diploma course is still pursued by the majority of trainees, increasing numbers of students are either enrolling at a university school where a college degree can be obtained, or are supplementing their professional training with college work leading to a degree. The nurse in an administrative or teaching position finds a degree, in most cases, to be a requirement.

When we consider that it has been only recently that all occupational therapy schools have granted a degree on completion of training, it is not surprising that the majority of our professional colleagues hold an occupational therapy certificate. Some of this group had a degree before entering professional training; others have since then obtained one by devoting either full or part time to further study. It is primarily the recently trained therapist, however, who has a degree.

In itself, this is a healthy situation. It confirms the belief that factors other than a college degree contribute to the successful practice of occupational therapy. There are, however, other aspects to the matter of higher education. The prerequisites for some positions include a degree and are therefore not open to those who could best fill them on the basis of maturity and experience. This is regrettable both from the therapist's viewpoint as well as from that of the profession. There is also the situation of the department head who has a diploma only, whereas her assistants, as well as the students she may be training, hold degrees. As a rule this situation causes no difficulty since experience and maturity are usually respected as much as is the possession of an academic degree. In some instances, however, it results in feelings of inequality, inadequacy, and lack of confidence.

Finally, and probably most important, a college education brings its own rewards and satisfactions. It opens new doors of interest and introduces new concepts. It is therefore one of the means to enriching life, and no opportunity in this direction should be left untapped.

We should like to discuss briefly some of the steps an OTR can take to obtain a degree without incurring great expense and extensive loss of time from the job. First, here are some basic points to be considered:

1. It is a universal ruling that at least one academic year's study must be done in residence, or, in other words, at the institution from which one plans to graduate. One year's work comprises approximately thirty Semester hours, or forty-five Quarter hours.

2. All occupational therapy schools accept transfer credits.

3. The majority of unversities or colleges which offer an occupational therapy course, allow some credit for the occupational therapy subjects of the former course. This is the case even though these may have been taken when the occupational therapy school was not affiliated with an institution of higher learning. A greater amount of credit is usually allowed if the candidate is a former graduate of the institution. Universities or colleges which do not have an occupational therapy course may not give credit for such work.

4. The majority of universities accept a limited number of credit hours earned through correspondence courses from an accredited institution which accepts its owns correspondence courses as college credits. Such credit is usually granted only for work taken in basic liberal arts subjects.

5. At a few universities or colleges incorporating an occupational therapy course, a student may earn some credits by taking examinations in subjects in which he has had no formal training but considerable experience. Permission for this is granted only on an individual basis.

What does all this mean to the OTR who would like to obtain a college degree? It means:

1. That you should plan, if at all possible, to obtain your degree at the school at which you originally took your occupational therapy training. If you are not able to go back to your own school, you should plan to get your degree at a university which has an occupational therapy course. In either case you will probably receive some credit for the occupational therapy subjects you have already taken and thus shorten the period of time ordinarily required to obtain a degree.

2. If there is an occupational therapy school in your locality, you may find it possible to acquire many of the needed credits gradually, by taking courses in the late afternoons, evenings, or on Saturdays. Eventually you may have to take time off from your job to take those subjects offered in day classes only.

3. If an occupational therapy school is not accessible, many of the credits needed may be accumulated at any nearby accredited college prior to the required year of resident study. Your curriculum during that period should include the basic liberal arts courses still needed. Professional courses should be saved for the time of your resident work at the occupational therapy school.

4. If there is no college or university in your vicinity, some of the basic requirements may be completed through correspondence courses. Many of the large, well-known universities have a Correspondence Study Department. Some of the advantages of this type of study are that it can be initiated at any time, the student can proceed as swiftly or leisurely as he desires and time and money need not be spent in travel. Furthermore, the tuition for correspondence courses is usually quite low.

5. You will want to plan your total curriculum at the beginning of this undertaking. Early in the program, a transcript of work you took at other universities, colleges, or an occupational therapy school, should be submitted for evaluation to the institution of your choice, in order to find out how many credits you already have, how many more you need, and in what subjects.

6. Similarly, your plan should be submitted for suggestions and approval to the head of occupational therapy at the institution from which the degree is to be obtained. In this way you can avoid loss of credit and therefore loss of time. Usually credits earned elsewhere than at the school at which you wish to complete your training, may be used as electives if not specifically applicable to the required curriculum. Each curriculum, however, whether in occupational therapy, education, liberal arts, or other, permits only a certain number of hours to be devoted to electives — another important reason for obtaining early approval of the total proposed course of study.

7. Do not forget to inquire about the possibility of earning credit by taking examinations. This is possible at only a few institutions and in a few subjects, such as English, Sociology and Foreign Languages. It is practice initiated by some universities during the postwar period for the benefit of the mature and experienced student.

Facts upon which the foregoing comments and suggestions are based were gathered through a recent survey. They should therefore provide accurate guidance for those currently interested in obtaining a degree. Programs of study will necessarily vary with the individual, depending to a great extent upon the type and amount of credit already obtained and the speed and continuity with which study progresses. The time required for full time study can be shortened considerably by accumulating as many credits as possible prior to the final period of resident study.

Further and specific information can, of course, be obtained only through the school or schools of your choice. It is hoped that these suggestions will be of help to all who may be interested.

Educational Field Secretary
Eva Otto, O.T.R.

FEATURED O.T. DEPARTMENTS

FOREWORD TO ARTICLE ON NEW TYPE OF OCCUPATIONAL THERAPY BUILDING

by

WILLIAM B. TERHUNE, M.D.
Trustee, Norwich State Hospital

The Trustees and Superintendent of the Norwich State Hospital believe that occupational therapy should receive a new orientation in the treatment of psychiatric illness. It is their concept that five factors influence the recovery of a patient: 1. Expert and thorough medical attention. 2. Scientific and adequate nursing care. 3. The education and rehabilitation of the patient, ordinarily enucleated around so-called occupational therapy. 4. Proper housing and living conditions of patients in residence. 5. Adequate social service to follow up and support patients when discharged from the hospital.

It can be seen from these remarks that in the opinion of the Trustees and Superintendent, occupational therapy approaches medical care in importance. Probably no state hospital in the United States has adequate medical and nursing care for their patients and it may be a long time before this can be provided. If one faces this fact squarely it indicates that a reeducation, rehabilitation and occupational therapy center is a necessity. In the past, occupational therapy in most state hospitals has been largely a matter of lip service with few occupational therapists and a relatively small number of patients receiving the benefits of this treatment. Indeed in many instances occupational therapy has actually consisted of vocational work, largely for the benefit of the hospital.

This Reeducational Center at Norwich State Hospital is a totally new type of occupational therapy building. It was designed after a survey of the entire United States to determine the best in existing occupational therapy and years of study by interested members of the Board, some of whom are psychiatrists and physicians. It was depressing to find how little inspiring information the survey brought forth. We recognize that many of the patients come into a state hospital with little education; these people have been handicapped almost from the beginning of their lives. Even after they recover from their psychoses, their lack of education and understanding of the world, coupled with the handicap of having had a mental illness, make it practically impossible for them to get a job after discharge. In other words, even without the handicap of mental illness they usually do not have sufficient education to get along in the world—which in many instances contributed to the onset of their psychosis.

The Reeducational Center will stand in the midst of the hospital, will be adequately staffed, and for the benefit of *all* the patients. We hope that most of the patients will wake up in the morning looking forward to the hours they will spend in the rehabilitation center. We know that the work of the doctors, nurses and attendants will be lighter and more pleasant because the patients will have engrossing interests, a better outlook on life, and improve more quickly. It will be open to the public and the patients will be encouraged to take their relatives to the center, show them what they are doing. With this attitude, relatives will look forward to a visit to the patients rather than dread it.

Thus our plan is to educate our patients and fit them to go out into the world and make their way. This may sound like a grandiose idea and we grant it is an expensive one but we are positive that in the long run it will actually save money for the citizens of Connecticut, and what is more important—it will bring greater happiness and health to our mentally ill. We also hope and believe that such a plan will do much to change the attitude of the public in regard to mental illness.

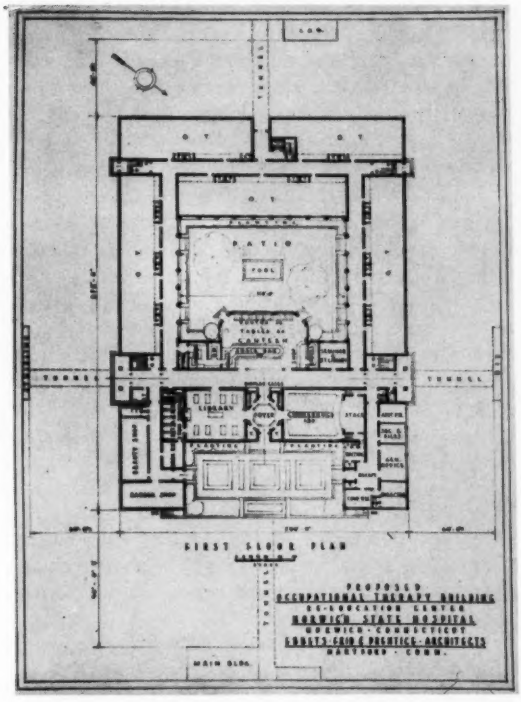
A SALUTARIUM (OCCUPATIONAL THERAPY CENTER) NORWICH STATE HOSPITAL, NORWICH, CONNECTICUT

T. MERRILL PRENTICE, Ph.D., B.Arch., D.P.L.G.*

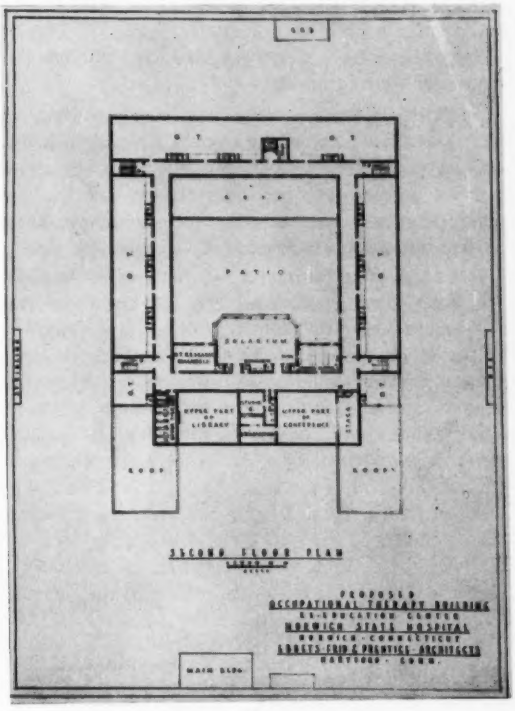
Occupational therapy has long been recognized as a powerful aid in restoring to health the patients in our mental hospitals. The occupational therapy department, however, has usually been relegated to any space available in the institution, without regard to its suitability, or even to the fire hazards incurred. Often the activities are dispersed throughout the institution from cellar to garret, reducing effectiveness to a low level and making administration difficult.

The purpose of the occupational therapy building designed for the Norwich State Hospital is to provide a center where all related activities will be efficiently housed and administered. In studying the requirements and formulating the program for this building, research disclosed that there is in the United States no existing building of this scope which could serve as a prototype. The work of developing the plan was, therefore, pioneering in a new field on the part of the building committee and the architects. Appreciation and much credit is due the committee and the Superintendent of the hospital for the freedom permitted the architects in working out their solution of the problem.

There are few buildings in which aesthetic considerations are as important as in this one. The entire concept of the building is based on the needs of the patient. The patient is mentally disturbed; he lacks self-confidence and courage; he may have a feeling of not being wanted, or of being unable to contribute to society; he may be merely apathetic. He must first be made to feel secure and at ease in an environment that is attractive, friendly and helpful. His interest must be aroused—interest in his surroundings, in himself, in his personal appearance. He must be given a task, however simple, that is within his present capabilities, so that he may have a satisfying feeling of accomplishment. He must then be encouraged to develop greater skill and pride in the completion of more advanced work, leading eventually to recovery and his restoration to society and the resumption of useful remunerative employment. Those fortunate enough to have a hobby to which they can turn in times of mental stress know the value of using the hands in creative work and the joy of achievement. Bearing this in mind, and trying to put ourselves in the position of the patient, we were better able to



FIRST FLOOR PLAN



SECOND FLOOR PLAN

understand the real purpose of occupational therapy and visualize the kind of building which could most successfully house it. The building should not be an architectural monument, but rather a *friendly workshop and social center* for those who are mentally ill but who can, in a favorable environment that affords adequate treatment, be expected to get well.

The site selected for the occupational therapy building at the Norwich State Hospital is centrally located, at the intersection of the main longitudinal tunnel and one of the main transverse tunnels which connect most of the buildings. In bad weather these tunnels are used as passageways, and must therefore be considered as approaches to the buildings. The location of existing buildings restricts the new project to a rectangle two hundred by two hundred and seventy-two feet. This will provide sufficient space on all sides for necessary driveways, light and air. Though it was considered desirable to locate all occupational therapy activities on the ground floor, the restrictions of the site made this impossible. A two-story and basement plan was therefore adopted.

In general, the requirements for the building are as follows:

1. Occupational therapy, including the industrial activities for both men and women, requiring about 28,000 square feet of space.
2. A patio.
3. A canteen for the use of patients, visitors and employees.
4. A library.
5. A beauty shop.
6. A barber shop.
7. The administrative offices.
8. A conference room.
9. Recreational facilities.
10. Locker rooms for both men and women, patients and employees.
11. Storage space for materials used in the occupational therapy department.
12. An office for the custodian of the building.

In considering the space devoted to occupational therapy, it was decided to erect no permanent partitions. The program for occupational therapy has been carefully worked out, and a definite area allotted to each activity. It is believed that this plan should not, however, be regarded as static; the Superintendent will be able to revise the program from time to time, as occasion demands, without making structural changes in the building. The greatest possible measure of flexibility has been provided. The windows are continuous, the mullions being so designed that movable steel partitions can be erected at almost any point. Toilets, instead of being centrally located, are distributed in pairs along the corridor side of the shop, so that with practically any future subdivision of activities each shop will have its own toilets and utility sinks without change in the plumbing.

The main passageway of the building is a broad transverse corridor corresponding to the transverse tunnel below which connects all the wards of the institution. At each end of the main corridor are the

principal entrances for the patients, men on the right and women on the left. These entrances are equally direct whether the patients are conducted through the tunnels or above ground.

South of the main corridor is a large patio around three sides of which, on two floors, are arranged the occupational therapy workshops. North of the main corridor are located the administrative offices and activities common to employees and patients who may or may not work in the occupational therapy shops.

The focal point and center of the entire composition is the canteen which projects into the patio like a bay, and opens on it with large plate glass windows. This canteen is open at any time to patients having ground privileges, and to all ambulatory patients in supervised groups, as well as to employees. It is provided with a snack bar, also with tables and booths, where coffee, sodas, and short order meals are available. At one end of the snack bar, and in plain sight, is the grill, where the light meals are to be cooked. Concealed behind the grill is the dishwashing section, and behind this in turn is a compact kitchen where food is prepared. At the opposite side of the canteen is the shop where small articles for personal use can be purchased. The canteen overlooks the patio, which is one hundred and fourteen feet wide and eighty-four feet deep. Wide doors lead down easy steps to the flagging where tables are set beside the pool in the shade of apple trees, for use in fine weather. The pool, which for safety will be very shallow, will be stocked with goldfish and should be a source of interest and entertainment for the patients. Watching the fruit trees blossom and bear fruit in season will also have therapeutic value. The corridors leading to the shops on the ground floor are treated as glazed colonades, giving a maximum feeling of openness.

The landscape of the patio is conceived not as an architectural embellishment but as an important feature in the basic purpose of the building. It is intended to establish a pleasant, sunny, friendly atmosphere—essential in the treatment of patients. This is a common meeting place for men and women engaged in all the various activities, a place where they can converse naturally and at ease. It is a closed court and therefore provides its own background, shutting out institutional buildings and all suggestions of illness.

Above the canteen, on the second floor, is a solarium where patients may rest in the sun. It is so arranged that it may also be used in inclement weather as a social center and a place in which to have informal parties. A small kitchenette makes it possible to serve light refreshments.

The second floor surrounding the patio consists of shops for occupational therapy. It is similar to the main floor, and equally flexible in design. The section south of the patio is omitted, providing a setback to give a more favorable angle for the sun's rays to penetrate.

A room on the second floor is set apart to be used for diagnostic study and research in occupational therapy. It is believed that such a room will be valuable in observing the response to new techniques of patients whose behavior is known, or in trying out various forms of occupational therapy with a patient or patients who do not seem to respond to the activies usually assigned.

On the north side of the building is an open court in the center of which is the main entrance, opening into an octagonal foyer. This foyer is across the main corridor from the canteen and directly opposite it. A wide plate glass window provides a view through the canteen of almost the entire patio. On the left of the foyer is the library with its stacks of books and its workroom. Beyond this in the left wing are the beauty shop and barber shop. These are not luxury features, but essential therapeutic adjuncts that stimulate the patients' sense of pride in personal appearance and in the maintenance of self-esteem. For the same purpose two display cases in the center of the main corridor will contain figures of men and women, simply and tastefully, but smartly dressed. It is hoped that these morale builders will arouse in patients a desire to return to their homes and normal surroundings, thus serving as a motivation for recovery.

On the right of the foyer is the conference room, and beyond that in the right wing are the administrative offices. The conference room will seat one hundred and eighty people. It is to be used for lectures, group singing, group therapy, and psycho-drama, as well as for psychiatric and medical conferences. Its location in the occupational therapy building makes it equally accessible to visitors and patients, and it is directly connected with the administration offices. Waiting and dressing rooms are provided, should patients be brought in for demonstration clinics. Near the administrative offices is located a small occupational therapy library, where seminars may be held.

Secondary entrances from the open court lead directly to the beauty and barber shops on the left, and to the reception room and administrative offices on the right.

Above the main entrance foyer on the second floor are broadcasting facilities, with a small studio and a library of recordings adjacent to it. Overlooking the conference room is the equipment and control room. Next to the control room is a projection booth for motion picture programs.

The basement of the building is divided into four sections by the existing tunnels. The southeast section is devoted to recreation. Facilities include a card room, rooms for table games, ping pong, pool, bowling alleys, and a space for shuffle board and informal dancing. There is also an office for the director of recreation.

The southwest sector of the basement contains the central storage space, cold storage room, and a store

(*Continued on page* 37)

PEOPLE YOU SHOULD KNOW

EVA M. OTTO

A Biographical Sketch
by
MARTHA E. JACKSON, O.T.R.
Ohio State University

Our present Educational Field Secretary, Miss Otto, is well known to many therapists through her work in the clinical field and as supervisor of student field experience. Others have become acquainted by assisting in the many projects that have been and are being carried on by the Education Office. On meeting her one is impressed by her charming, gracious manner, and sincere interest in people. On working with her one admires the way in which she plans and follows through on any project.

Making plans and working out details for their completion seem to be quite natural for her. While growing up in Germany her greatest desire was to make her home in the United States and she worked toward that goal. It meant waiting until an older sister came and started nurses' training before she could follow. Once here the next step was preparing for a profession, but what?

One summer day while at the shore she met a student who had been accepted for training at the Philadelphia School of Occupational Therapy. This seemed to be just the right thing because Miss Otto was interested in some medical field other than nursing which combined her creative talents and desire to work in a hospital. By autumn she was also enrolled at Philadelphia and was on the way up the first step of her professional career. After graduating in 1932 she worked with the New York Association for the Blind and later the Institute of Opthalmology at Presbyterian Hospital in New York. This experience was most valuable when someone was needed to develop the outline on eye conditions for the first comprehensive registration examination.

While working in New York she took courses at Columbia University and Hunter College. These extra-curricular activities continued at Western Reserve University when she went to the Cleveland Rehabilitation Center first as staff therapist and from 1939-44 as supervisor of occupational therapy. The Cleveland Rehabilitation Center maintained a student training program and many therapists recall what a thorough orthopedic training they received under her. She was also active as a member of the Ohio Occupational Therapy Association and held various offices while in Ohio.

In 1944 Ohio State University was in need of an assistant and instructor in the recently organized department of occupational therapy. Miss Otto agreed to accept the position and work toward a degree. During the next four years she did much to strengthen the training program and continue her interest in the clinical training field.

Due to all the accumulated credits from other institutions it was possible for her to complete requirements for a Bachelor's Degree in one year. By now the habit of taking extra courses in addition to a job was well formed so in 1947 she received a Master's Degree in Psychology.

This is indeed excellent preparation for the position of Educational Field Secretary which she accepted in March, 1948. With all the numerous projects being handled through her office she has little opportunity to indulge in extra-curricular activities. Chess is one of her favorite games. She has participated in several tournaments and carried off high honors.

Miss Otto is to be congratulated on the splendid job she is doing in the Education Office. The steady progress which is being made is evidenced through the reports which appear regularly in the Journal.

EDITORIAL

OUT OF THE BASEMENT

Physicians and hospital superintendents have long recognized the need for occupational therapy treatment and the value of the treatment in adjusting the patient to hospital routine, his illness and his prognosis. But because the occupational therapy department has never been a lucrative department, during the depression many hospitals curtailed the activities and staff of O.T. in order to cut what many considered the *frills* of medical treatment.

More recently special emphasis has been placed in medical circles to treating the *whole patient*. After an era of specialization, medical men realized that the X quality of the patient — namely his personal reaction to his illness — predetermined his recovery as strongly as his diagnosis. Needing more study of the patient as a person, physicians demanded occupational therapists to help with the added study and O.T. again became a vital treatment program in progressive and modern hospitals.

It is gratifying to occupational therapists over the country to see the steady and solid advancement of their profession though alarming to see the demands for trained personnel far exceed the supply even for years to come. But though the profession is earning a deserved respect, the departments fare little better than back in earlier days. Quarters are cramped, rooms poorly planned, and many departments still operate in basement quarters.

But not so at the Norwich State Hospial in Connecticut. After study and research, the hospital administrators and trustees have planned a building for their occupational therapy department which will meet the needs of their patients in the most desirable way. Therapists, physicians and hospital superintendents all over the country will do well to study the plans of the Norwich State Hospital as outlined in this issue in the "Featured O.T. Departments" section.

Their research and study will guide the way for future departments. Congratulations to the Norwich State Hospital for their vision, foresight and planning. Their thoughtful leadership will repay them many times over in more successful and satisfying results with their patients.

THE AMERICAN JOURNAL OF OCCUPATIONAL THERAPY

Published bi-monthly by the American Occupational Therapy Association. Editorial office, 1313 E. Elmdale Ct., Milwaukee 11, Wisconsin.

Editor.....Lucie Spence Murphy, O.T.R.

Associate Editors.....Frances Stakel, O.T.R.
Ruth Bell Wendle, O.T.R.

Subscription rates: Price to members included in yearly fees; to non-members $5.00 a year domestic, $5.50 foreign.

Advertising rates: Rates for display advertising furnished on request. Classified advertising accepted only for Situations Wanted and Positions Available.

Change of address: Notice should include the old as well as the new address, postal zone, and should be mailed to the editorial office four weeks in advance of publication date.

Letters to the Editor

Dear Editor:

The Education Office of the American Occupational Therapy Association frequently receives complaints and criticisms for its long delay in informing schools of occupational therapy of the standing of their graduates on the national registration examination. As most of us know only too well, an examinee usually has to wait three months following the writing of the examination before receiving word from the school director regarding eligibility for registration. This is a long time during which to live in suspense and we are in full sympathy with all those who have experienced this waiting period.

May we explain the reason for this situation.

The eligibility requirements for the registration examination permit the writing of the examination by students who are scheduled to take their final month of clinical training *following the* examination date. Clinical training reports for this group are therefore not available until one month after the date of the examination. By that time the Education Office usually has completed all scoring and computations for the examination ratings, except those for this particular group.

The final rating of each student on the registration examination represents a combination of the grades earned on the written examination and in clinical training. The written part carries a grade weight of 80%; clinical training carries a weight of 20%. In computing the final rating, each student's raw score obtained on the written examination is converted into a percentage score, and each student's clinical training grades are averaged and then also converted into the percentage score. Both these scores are then added to give the final rating. Only after the grades for *all* examinees have thus been computed can the passing score for the examination as a whole be established.

From this it is obvious that ratings cannot be released to the schools until *all* the clinical training reports of *all* examinees have been received. The delay or promptness with which the final reports of the group which has not completed clinical training are submitted to us, determines the date on which we can notify school directors of examinees' standings. Unfortunately, each time the examination is given, there are a few stragglers who thus delay the release of the grades of all examinees for several weeks.

This situation has been called to the attention of the school and clinical training directors, and all have been urged to cooperate in every possible way. We shall appreciate the understanding and patience of the registration examinees in this matter. As formerly, we shall continue to make every effort to shorten the necessary delay.

(Signed)
Eva M. Otto, O.T.R.
Educational Field Secretary

DELEGATES DIVISION

INDIANA

Reporter, Evelyn Marsh, O.T.R., Publicity Chairman

Five Meetings of the Indiana Occupational Therapy Association were held during the year 1948-49:

SEPTEMBER, 1948—An all day meeting was held at Indiana University, Bloomington, Indiana. Dr. Robert Milisen, Associate Professor of Speech at the University, spoke on "Aphasia", describing the condition and the program in the Speech and Hearing Clinic there. The group then toured the clinic after which the day ended with a picnic supper.

NOVEMBER, 1948—A business meeting was held at Norways Sanatorium, a private mental hospital. The meeting consisted of reports of National Convention and reports of committees. There was an interesting display of patient projects.

JANUARY, 1949—A joint meeting with the Indiana Physical Therapy Association was held at Indiana University Medical Center at which Dr. Leslie W. Freeman, Director of Surgical Research, spoke on "Paraplegia" and showed slides to illustrate his talk.

MARCH, 1949—The department of Vocational Rehabilitation had a panel discussion and movies on the different phases of rehabilitation. Mr. Floyd Hammond, Area Supervisor, presided. Questions were raised from the group on which type of patients would be eligible and how referrals could be made.

MAY, 1949—The last meeting of the year was a dinner meeting at which election of officers was held. Committee chairmen gave the annual reports of their various activities.

FEBRUARY, 1949—A rummage sale to raise money for the association was held in the occupational therapy department at Riley Hospital. Approximately $135 was raised which helped to defray expenses of the delegate to the convention.

The Officers and Board of the Indiana Occupational Therapy Association have been pleased with the interested participation of its' 30 members. Although small, they are a live and active group.

Average attendance is 20.

OFFICERS

President—Joan McCord, O.T.R.
Vice President—Harriett Warren, O.T.R.
Secretary—Marian Kraker, O.T.R.
Treasurer—Anita Slominski, O.T.R.
Delegate—Edna Faeser, O.T.R.

MARYLAND

Delegate-Reporter, Mrs. Eleanor Stisser Owen, O.T.R.

During the year 1948-49, the M.O.T.S. held five interesting and well-planned meetings with an average attendance of 25 of its members. Our society consists of 41 active members, the majority of whom are practicing in Baltimore and its environs, and 41 associate members interested in promoting occupational therapy.

Our first meeting took place in October at the St. Charles Restaurant. After dinner there was a business meeting and presentation of the delegate's report on the 1948 convention.

Early in December we held another dinner and business meeting. This was followed by an idea exchange, at which several of our members gave short, descriptive talks on certain craft-activities which they had found applicable in their specific fields.

The February meeting was held at the Nursery School for Cerebral Palsied Children. Miss Edith H. Brokaw, Instructor of O.T. Training at Columbia University, was the guest-speaker. Miss Brokaw's subject was *The Role of the Occupational Therapist in an Orthopaedic Hospital,* graphically presented with colored slides. We are grateful to Miss Brokaw for having braved the wintry winds and snow to come from New York to be with us!

On April 23, Maryland played hostess to the Virginia and District of Columbia Association at a tri-state meeting at the Veterans Hospital, Perry Point, Md. It was gratifying also to see a number of our associates from nearby Pennsylvania. The morning session consisted of a talk, *O.T. in Conjunction with Lobotomy and Electro-Convulsive Treatment,* presented by Dr. Merril Eaton, of the Sheppard and Enoch Pratt Hospital; a film entitled *Treatment of Fractures;* and a talk, *Geriatrics and O.T.,* by Miss Grace Hildenbrand, Chief Occupational Therapist; City Home, Welfare Island, N.Y. After lunch there was a tour of the occupational therapy shops. The afternoon session included talks on *Rehabilitation of the T.B. Patient* by Thomas D. Braun, Supervisor, Md. Rehabilitation Service, and on *Color Therapy in the Organization of an O.T. Dept.* by Miss Eleanor Stapin, Chief Occupational Therapist at Perry Point Hospital.

A picinc meeting was held in June at the Children's Rehabilitation Institute, Cockeysville. After an enjoyable social gathering on the lawn, there was a business meeting at which the annual reports were read. At the close of the meeting, a film was shown, entitled *A Day in the Life of a Cerebral Palsied Child.* This was of special interest, since the movie had been taken at the Institute.

During the past year our Publicity Committee, headed by Mrs. Marshall L. Price, Director of Occupational Therapy, Sheppard and Enoch Pratt Hospital, has done an excellent job in making many local contacts. Mrs. Price, who has recently given talks on occupational therapy to schools and clubs in Baltimore, is Chairman of the Recruitment Committee which will soon go into full swing. She is likewise organizing a training program for occupational therapy volunteer assistants to serve in our state mental hospitals. This program is sponsored by the M.O.T.S. in conjunction with the Mental Hygiene Society of Maryland. Also, several occupational therapy exhibits from Maryland have been shown in other states.

Miss Ruth Brunyate, Director of Occupational Therapy, Children's Rehabilitation Institute, presented papers on occupational therapy with the cerebral palsy at the New York and Washington, D.C. conferences on cerebral palsy. The February 1949 issue of *The Crippled Child,* published by the National Society for Crippled Children and Adults, carried a paper written by Miss Brunyate.

Miss Muriel Zimmerman has resigned as President of our organization. The Vice-President, Miss Lora E. Dunetz, will take over her duties until our next election in June, 1950. Miss Anne E. Lynch, our Treasurer, is leaving Maryland to accept a position in Rhode Island. We are sorry to lose two such capable officers.

OFFICERS

President—Miss Lora E. Dunetz, O.T.R.
Secretary—Mrs. Catherine L. Shaw, O.T.R.
Treasurer—(To be elected at next meeting)
Delegate—Mrs. Eleanor Stisser Owen, O.T.R.
Alternate Delegate—Miss Ruth Hadra, O.T.R.

IOWA

Reporter, Marguerite McDonald, O.T.R., President

Since the last report of the Iowa Occupational Therapy Association in the AJOT, four meetings have been held. On November 6, 1948, a meeting was held at the Mt. Pleasant State Hospital, Mt. Pleasant, Iowa. Miss Margaret Biggerstaff, O.T.R., and her staff, in cooperation with other personnel of the hospital, planned an interesting program. This meeting was attended by many active members of the association, as well as associate and student members.

An outstanding feature of the meeting was music presented by patient groups under the direction of Frederic Gingrich, Director of Music Therapy.

The spring meeting of the association was held in Iowa City, Iowa, February 18 and 19, 1949. Mrs. Janet Sloan Fields, O.T.R., therapist at the Iowa Hospital School for Severely Handicapped Children, was program chairman for this meeting. Lectures were divided between medical and craft subjects. Dr. R. L. Jackson who was recently featured in the A.M.A.

Journal and Time magazine, spoke on "Rheumatic Fever". Dr. Barry Friedman, resident in orthopedic surgery, gave an excellent lecture demonstration on "Joint Measurement". Mrs. George Mowry whose ceramics are receiving national recognition, spoke to us on the use of Iowa clays. Mr. Raoul Delmare, who has been a member of the past three International Silversmithing Conferences sponsored by Handy and Harman, displayed work done at these conferences and talked on the craft of silver work. Mrs. Warner Lewers displayed materials woven for her Master's Degree in Textiles and discussed problems of weaving. Dr. Wendal Johnson, Director of the Speech Clinic at the University of Iowa, and author of the book "People in Quandries", spoke on the subject of "What Handicaps the Handicapped", at the dinner meeting.

June 4, 1949, a meeting of the I.O.T.A. was held at the Veterans Admistration Hospital in Des Moines. Miss Maxine Ferrell, O.T.R. and her staff arranged the program. Dr. Joyce Perrin, who is in private psychiatric practice in Des Moines and a consultant to the V.A. Hospital, gave a resume of the panel discussion on occupational therapy held at the American Psychiatric Association meeting held in Montreal. Excellent craft demonstrations were given by Mrs. Robert Mahon, O.T.R. on "Silkscreen Printing", and by Maxine Ferrell, O.T.R. on "Plastics". Noon lunch was provided by the members, patterned from an old fashioned box social, with individual lunch boxes auctioned off and the proceeds added to the treasury. The yearly election of officers was held at this meeting.

The Veterans Administration Hospital at Knoxville, Iowa, were royal hosts to our association on October 1, 1949. Mr. George Frye, O.T.R. and Mrs. Betty Nylund, O.T.R., served as co-chairmen for the program. Twenty active members, six associate members and nineteen student members were present at this meeting. Dr. Walter Barton, Superintendent of Boston State Hospital, Boston, Massachusetts, flew out to the middle west to speak to us on our role in psychiatric treatment. His lecture was taken from his notes for a chapter that he has written for the revised edition of Dr. Dunton's book, "Prescribing Occupational Therapy". Watch for this publication for we were all pleased with this presentation.

The main business activities of our association during the past year has been discussion of national issues and instructing our delegate in our group thinking for submitting our recommendations to the House of Delegates of the A.O.T.A. Delegates reports have then been submitted to the group in session. In order to save meeting time, it has been found expedient to mimeograph individual copies of her report for use by the members.

How to boost our finances is always important matter for discussion. Most successful in our group is a craft auction with articles submitted from each member. Bidding is hot and heavy, and there is fun galore, while the treasury slowly mounts. It is also a fine way to share craft ideas. Registration fees are charged at each meeting. At the present time O.T. notepaper is being made for sale to our members and friends. Also, an "Idea Book" is being planned for sale to members in which there is a contribution from each member of a favorite pattern or idea.

In cooperation with the national office, Mrs. Janet Sloan Fields, O.T.R., has been actively engaged in distributing our recruitment publicity. Letters and brochures have been sent to schools in Iowa and additional letters have gone to service organizations telling of our availability to speak to them on occupational therapy.

Some items of business accomplished during the years are to create greater understanding between the active members and the associate members. Associate members are now privileged to vote on matters pertaining to the state association, and an associate member serves on the Executive Committee, and the programs are planned with the interests of the associate member in mind. Concerning student membership, rather than having individual student membership, it was decided to have the Occupational Therapy Club at the State University of Iowa, join the state association as a group, with a small assessment from their club dues going to the association as their dues. A student member also serves on the Executive Committee.

OFFICERS

President—Margeurite McDonald, O.T.R.
Vice-President—Mrs. Janet Sloan Fields, O.T.R.
Secretary-Treasurer—Miss Doris Klindt, O.T.R.
Delegate—Miss Maxine Ferrell, O.T.R.
Alternate Delegate—Miss Jean Lovett, O.T.R.

NEW YORK

Delegate-Reporter, Blanche M. Ringel, O.T.R.

During the past year, the New York Occupational Therapy Association had a very stimulating program of activity. There have been five general meetings, with an average attendance of 45-50 members present out of a total membership of approximately 200. All meetings were held in the Greater New York area although our membership includes a great many in other parts of the state and country.

The first meeting was held in November. The report of the delegate was presented and discussed briefly. The guest speaker, Miss Lucy G. Morse, O.T.R., told of her experiences in Czechoslovakia and her observations of occupational therapy in other European countries that she visited.

In January, we held a round table discussion meeting at the Payne Whitney Psychiatric Clinic. This

meeting was well attended and extremely interesting. In the discussion groups, therapists all had a chance to speak and express their views. Refreshments were served later, and a summary of each discussion was given.

A business meeting was held in February for the purpose of action by the members on the questions submitted by the House of Delegates, and presentation of the proposed new constitution. The discussion by the members on the constitution helped the committee tremendously in preparing the revisions for final voting in May.

The guest speaker at the March meeting was Dr. Eugene L. Swan, Senior Psychiatrist, Rockland State Hospital. Dr. Swan is in charge of the unit for adolescent boys at Rockland, and his topic was *Treatment of Psychiatric Problems of Adolescent Boys.* He cited many case histories to illustrate the effective work being done.

The 22nd annual meeting in May was at the Hotel Shelburne and the Institute of Rehabilitation and Physical Medicine. The business meeting in the morning was devoted to reports, approval of the new constitution, and the election of officers.

A number of distinguished guests attended our luncheon, among them Dr. William B. Snow, Director of Physical and Occupational Therapy at Columbia-Presbyterian Medical Center, and Dr. Donald A. Covalt, Clinical Director, Institute of Rehabilitation and Physical Medicine.

Dr. Covalt spoke on the topic *An Integrated Rehabilitation Program* outlining the scope of rehabilitation as it is now understood, its accomplishments to date and the wide needs as yet unsatisfied.

The meeting then adjourned to the Institute, where Dr. Covalt again spoke, emphasizing the idea of teamwork. Members of the Institute *team* then gave a brief account of their work. A very interesting demonstration of prosthetic appliances, their selection and use, was a feature of this session, after which members had a chance to inspect the Institute.

The New York Occupational Therapy Association published 5 issues of the *Bulletin* during 1948-49, containing vital, interesting information to all members to help them know their organization and its activities.

In March and April, 1949 the Association held a *Neurological Institute* consisting of six lectures. The subjects were *Hemiplegia, Peripheral Nerve Injuries, Multiple Sclerosis.* Each topic was covered with a lecture by a medical authority, and a demonstration or discussion by an occupational therapist, and in some cases by a physical therapist and an occupational therapist.

Notes have been reproduced in a booklet, and may be obtained from Mrs. Ruth Morehouse, Director of Occupational Therapy, Halloran V. A. Hospital, Staten Island, New York at $1.00 per copy. Please make checks or money orders payable to the New York Occupational Therapy Association.

Miss Susan C. Wilson, our capable president of last year, sent a questionnaire to all members and potential members of the state association, designed to discover what the occupational therapists, members and non-members, feel the professional organization should offer them.

A condensed report issued by Miss Wilson shows that:

1. A significant number of members and non-members thought.
   a) They had not had sufficient opportunity to participate in the work of the association.
   b) They would enjoy such participation.
   c) Active participation increased interest.
2. Occupational therapists want their professional organization to work for:
   a) Improved personnel policies.
   b) Better professional information services. Publications to contain features of technical value.
   c) Greater audience participation at meetings.
   d) Recognition of interests and problems of large student groups in area.
   e) Closer integration with allied professional groups.
   f) Warm personal relationships between management and members, between member and member.

We hope that a more complete report will be published by Miss Wilson at a later date.

The New York Association participated in the Women's International Exposition from November 7-13, 1949 by having an exhibit primarily aimed at recruitment. The A.O.T.A. exhibit was used, and the booth was manned by occupational therapists, students, or volunteers at all times.

The Occupational Therapy Volunteer Training Committee under the chairmanship of Mrs. Edgar D. Oppenheimer, is now affiliated with the United Hospital Fund at 8 East 41 street, New York City.

This fall the committee conducted the 11th class since 1942, graduating 37 volunteers on December 14th. There are now about 100 volunteers working in hospitals in and around the metropolitan area. The course of study was revised this year, and occupational therapists taught the theory and crafts to the volunteers.

The Recruitment Campaign is progressing smoothly. The committee has sent letters and brochures to vocational advisors in the area and a speakers' bureau is being organized.

The program for this season began in November with a meeting held at the Payne Whitney Psychiatric Clinic. Mr. Jon Gnagy well-known television artist of New Hope, Pa., demonstrated his techniques in drawing and painting. His provocative topic *How Do You Doodle* attracted a large number of members to the meeting.

During the coming year we are planning to have three more program meetings, two business meetings and a teaching institute.

OFFICERS

President—Mrs. Harriet J. Tiebel
1st Vice President—Miss Viola W. Svensson
2nd Vice President—Miss Florence M. Stattel
Recording Secretary--Miss Norma Alessandrini
Corresponding Secretary—Miss Evelyn Wolff
Treasurer—Miss Elizabeth Moeller
Asst. Treasurer—Miss Shirley B. Lewis
Delegate—Mrs. Blanche M. Ringel
Alternate Delegate—Miss Doris E. Nichols

COMMITTEE REPORTS

REPORT OF THE EDUCATION COMMITTEE

Book-Cadillac Hotel, Detroit, Michigan, 1949

Present Status

There have been some inquiries and expressions of interest during the past year, but no new schools have been opened.

The occupational therapy course at the Colorado College of Agriculture and Mechanic Arts is now ready for accreditation but no steps have as yet been taken toward the final action and inspection by the American Medical Association. When this is done all twenty-five schools in this country and the Toronto School will be fully accredited.

Enrollment and Recruitment

Statistics obtained from the schools indicate that there is an increase in the anticipated new enrollment in 1949 as compared with the actual enrollment in 1948 (1948—563; 1949—656).

Approximately 375 O.T.s have been graduated this year. It is estimated that about 396 will be graduated in 1950. Only four schools report that they are filled to capacity.

We are fully aware of the very great demand for O.T.s at the present time, therefore, it is obvious that active public education and recruitment is vitally necessary.

Sub-Committee on Schools and Curriculum

This Committee acts as a forum for discussion of matters pertaining especially to the schools. One of the points of interest has been the development of courses for graduate study. More and more opportunities are being offered for courses in special fields such as cerebral palsy and polio and shortly, it is hoped, in psychiatry.

The Committee on Curriculum Guide has made progress in developing the master outline of courses of occupational therapy from the outlines submitted by the schools.

Sub-Committee on Clinical Training

This Committee has devoted the major part of its time to work on the returns and analyses of the questionnaire sent out by the Education Office on the student rating procedure. Mechanics of following through with this problem have been set up.

Considerable time has been devoted to working out a test form for evaluation of O.T. departments.

Other projects have included (1) the evaluation of training centers by students; (2) the clinical training pool; (3) the student's manual; (4) student health policies. No specific action has been taken but work will be continued on all of these.

Training Courses for Psychiatric Assistants

Considerable time and thought has been given to proposed training courses for psychiatric assistants. The end results have been the following recommendations, which have been approved by the House of Delegates and the Board:

1) that additional effort be made in recruitment of students in O.T., especially for service in psychiatric hospitals;
2) that the American Psychiatric Association, Mental Hygiene Association, foundations and federal agencies be approached for consideration of methods of obtaining scholarship assistance for students who will agree to serve in the psychiatric field;
3) that the A.O.T.A. make available consultation service to State Departments of Mental Hygiene and Departments of Welfare or individual hospitals wishing to establish or revise courses for attendants or aides to serve in O.T. Departments;
4) that state and regional O.T. associations enlist the help of state psychiatric associations to clarify the status of sub-professional personnel and enforce regulations that they be employed only under the supervision of an O.T.R.;
5) that the A.O.T.A. does not accredit any course of

training for sub-professional personnel, nor can it give professional recognition because of the varying state requirements; but that such employees are eligible to become associate subscriber members of the Association;

6) that those with adequate educational qualifications be encouraged to become trained O.T.s;

7) that the National Office, the Legislative and Civil Service Committee and the Sub-Committee on Neuropsychiatry stand ready to assist in implementing these recommendations.

Relationship with Physical Medicine

The relationship between occupational therapy and physical medicine has also been a matter of great concern to which much consideration has been given. The Congress on Physical Medicine through the Council on Physical Medicine of the American Medical Association recommended to the Council on Medical Education and Hospitals that (1) occupational therapists should be known as "occupational therapy technicians" and that (2) a physician or psychiatrist should be medical director of a school of occupational therapy. The A.O.T.A. has requested that (1) the name should be changed inasmuch as the term "technician" has a sub-professional connotation and if adopted would in civil service classification place the O.T. at a lower grade with lower salary that at present. It was further requested (2) that the present organization of the schools under advisory committees be continued because such organization maintains the wide scope of O.T. whereas direction by a physician representing any one medical specialty tends to limit it.

(*Note*: At a meeting of the Committee on Essentials of the Council on Medical Education of the A.M.A. on October 20, 1949, it was agreed that the designation "occupational therapist" should be retained. The recommendation was made that "the clinical training in a school of O.T. should be under the direction of a physician or a committee of physicians whose qualifications are acceptable to the Council. If a committee provides the direction, the chairman should be designated as medical director." The A.O.T.A. again requested that the organization of an advisory committee be retained. The Council on Medical Education, however, made the above recommedation to the House of Delegates of the A.M.A. and that body approved it on December 6, 1949.)

The following recommendations were made and approved by the House of Delegates and the Board of the A.O.T.A.:

1) that a revised statement of policy be formulated for publication;

2) that the American Psychiatric Association's statement of policy concerning the relationship between the psychiatrist, physiatrist and occupational therapist be published immediately and that similar support of allied groups such as the National Tuberculosis Association, American Heart Association, American College of Orthopedic Surgeons, be solicited;

3) that the Consultants on O.T. to be Council on Physical Medicine and the A.O.T.A. Fellows be contacted and brought together with representatives of the Association for support and advice on further action; and

4) that approval and commendation be given the work of the Education Office; that the research program, which constitutes an accrediting basis, be extended to provide all the mechanics for accreditation of O.T. schools.

Thanks are due to the hard-working chairmen of committees, to the members of the committees who have given so much time and effort to the work assigned to them, to the members at large many of whom have so patiently answered questionnaires and have responded to all calls for ideas and assistance and, finally, to Miss West and Miss Otto who have carried the burden of keeping our efforts organized and coordinated.

Respectfully submitted,
Helen S. Willard
Chairman, Education Committee

Education Committee

American Occupational Therapy Association

Chairman
Helen S. Willard—Philadelphia School of O.T.—1952

Vice Chairmen
Henrietta McNary—Milwaukee-Downer College—1951
Mary D. Booth—San Jose State College—1951

Members

School Representatives
Marie Louise Franciscus—Columbia University—1951
Marjorie B. Green—Boston School of O.T.—1950
Barbara Jewett—Wayne University—Chairman, Sub-Committee on Schools and Curriculum—1952
Sister Jeanne Marie—College of St. Catherine—1950
Eva Otto—Educational Field Secretary

Clinical Training Representatives
Naida Ackley—Trenton State Hospital, New Jersey
Margaret Gleave—Delaware Curative Workshop, Wilmington, Delaware
Ruth Grummon—Sunnyside Sanatorium, Indianapolis, Indiana, Chairman, Sub-Committee on Clinical Training
Carlotta Welles—Los Angeles County Hospital, Los Angeles, California

Alternates

School Representatives
Edna Ellen Bell—College of Puget Sound—1951
Martha Jackson—Ohio State University—1950
Caroline Thompson—University of Wisconsin—1951
Gladys Tmey—Michigan State Normal College—1950
Fanny Vanderkooi—Texas State College for Women—1951

Clinical Training Representatives
Florence Clemens—Williamsburg State Hospital, Williamsburg, Virginia
Elizabeth Collins—Iowa University Hospital, Iowa City, Iowa
Edna Faeser—City Hospital, Indianapolis, Indiana

Inez Huntting—Boston State Hospital, Boston, Mass.
Ruth Robinson, Lt. Col.—Office of the Surgeon General, U.S. Army, Washington

NOTE: Dates following names of school representatives indicate end of term of office at time of annual meeting.

Subcommittee on Clinical Training

Miss Naida Ackley, Trenton, New Jersey
Miss Mary B. Beach, V. A., Washington, D. C.
Miss Florence E. Clemens, Williamsburg, Virginia
Miss Elizabeth Collins, Des Moines, Iowa
Miss Ella V. Fay, Chicago, Illinois
Miss Inez Huntting, Boston, Mass.
Lt. Col. Ruth Robinson, Washington, D. C.
Miss Florence MacLean, Chicago, Ill.
Mrs. Libbie S. Rose, Milwaukee, Wisconsin
Miss Clare S. Spackman, Philadelphia, Pa.
Miss Ethel E. Huebner, Trenton, New Jersey
Miss Carlotta Welles, San Francisco, Calif.
Miss Norma Smith, Milwaukee, Wisconsin
Miss Alice Letchworth, Philadelphia, Pa.
Miss Bekke Engleke, Los Angeles, Calif.
Miss Jane Myers, Glen Dale, Md.
Miss Edna Faeser, Indianapolis, Ind.
Mrs. Frances Herrick, Detroit, Michigan
Miss Ruth Grummon, Indianapolis, Indiana
Miss Jean Hoskins, Wilmington, Delaware
Miss Margaret Gleave, Wilmington, Delaware

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Art designs and mobiles, complicated or simple, are more satisfying to an adult than constructing toys unless the patient has been hospitalized for a long time. Then attempting toy models of tractors, cars, boats and other objects not seen for a long time proves stimulating.

If you would like additional information regarding Magnet Master write to Editor, American Journal of Occupational Therapy, 1313 E. Elmadale Court, Milwaukee 11, Wisconsin.

* * *

The AmazArt colors are versatile paints suitable for decorating glazed or unglazed pottery, wood, cloth or glass and particularly suitable for occupational therapy departments because the colors are used right from the tube. No preparation, no brushes to clean, and no extra equipment required. The tube of paint is used like a pen. Write the Journal for name of your supplier and manufacturer.

* * *

Note from Lottie Blanton included with her very attractive Christmas card: "Spraying this snow on with an atomizer is one of the best treatment activities I've found for a patient needing grasp". Though Christmas is past, Valentine and Easter cards could be enhanced by the same process as the "snow" was silver paint or ink and enhanced the picture by adding sparkle.

Norwich State Hospital

(*Continued from page* 28)

room for salvage materials. Centrally located in this sector is the mechanical equipment of the building, a room for the custodian, and a store room for the building supplies.

The basements of the two north wings are similar and contain locker rooms and showers for men on one side and for women on the other. Each side provides for both patients and employees. The employees who work in the building will use the lockers to change into uniforms, and all employees of the institution may use the locker rooms to dress for outdoor sports, and to shower and change after outdoor exercise. The patients will have similar facilities, and the lockers provided will be sufficient to take care of visiting teams also.

The exterior of the building will resemble a modern industrial plant, with the continuous steel sash emphasizing horizontal lines. The facade of the north en-

trance court will be of limestone veneer. The windows of the library and conference rooms present the appearance of a pierced stone grille the size of the entire side of the rooms, rather than that of conventional windows. The columns and half-columns surrounding the patio, as well as the exterior of the canteen, will be of limestone. The exterior walls of the solarium above the canteen will be entirely of glass supported on light steel members.

Except for the facade of the entrance court, the occupational therapy building might be considered as "inside out", the main front facing on the patio. This reversal of the usual architectural conception is entirely in accord with the thinking of the Board of Trustees and the Superintendent of the Norwich State Hospital. The building is entirely for the benefit of the patients, and they will be inside.

Paraplegics Can Work

(*Continued from page* 17)

Since this study was limited to six cases, no broad conclusions can be drawn. It has shown, however, that some paraplegic veterans can be employed for pay and can work a standard work week. Further, it has established that these individuals can have work objectives and plans for becoming self-supporting. For many paraplegic veterans, discharge from the hospital marks the beginning of a new life. However, they need not fear that the avenues of opportunity are closed to them. Paraplegic veterans can work again.

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SCHOOL ACTIVITIES

ILLI-SOTA

ILLINOIS STUDENT OCCUPATIONAL THERAPY ASSOCIATION

The student association at the University of Illinois is divided into two active groups. One group is made up of students on the "downstate" campus at Urbana, Illinois, and the other group is on the campus of University of Illinois Professional Colleges which is located in Chicago in connection with the University of Illinois Hospitals. Each group elects its own officers, plans its own programs, and takes part in activities occurring on their respective campuses.

"Downstate" Campus:

The students in the School of Occupational Therapy on the Urbana campus are very active during the school year. The group meets every two weeks with guest speakers who are therapists from neighboring towns. The director of a school for the acoustically handicapped and instructors of occupational therapy from the Chicago campus have also been guest speakers at various times throughout the school year.

Besides these regular meetings, the "downstate" group have actively participated in university activities during the year. Each fall there is a Student Activities Night which is more or less an open house for the Freshmen. Campus organizations set up booths and arrange exhibits to better acquaint the new students with the various organizations and interest them in becoming members. Illi-Sota's exhibit at this time includes some articles made by the students in their craft courses, and cartoon posters explaining something of the high lights of occupational therapy in school as well as in the clinical training. Two students dressed in clinical training uniforms, stand by and answer any questions which arise during the course of the evening. This exhibit proves most successful in helping the student body become more familiar with the occupational therapy cirriculum.

At Easter time Illi-Sota cooperates with the local Community Chest by selling paper Easter Lilies in the interest of the National Society for Crippled Children and Adults. Each girl of the organization sells these lilies for at least two hours in either Champaign or Urbana.

In the spring, the campus plans a Mother's Day weekend. Last year, Illi-Sota presented an exhibit in the Student Union Building in connection with a reception given by the Union for visiting mothers. A

great many craft projects were displayed along with demonstrations of treatment and craft techniques. A set of cartooned picture posters were shown again to help explain the occupational therapy curriculum on both campuses. Besides the mothers, faculty members who teach courses in the occupational therapy curriculum were invited. It was felt that they might enjoy seeing the results of their courses and the way their contribution tied in with the students' clinical experience.

The last meeting of each semester is reserved for a farewell dinner for the girls who are leaving for the Chicago campus. At this time, they are presented with their student badges, and are given a royal send-off by those who are staying.

Chicago Campus:

In September and March of each year, new students transfer to the Chicago campus for advanced academic instruction and clinical experience. Illi-Sota plans activities to help the new girls feel more at home by acquainting them with other students and with staff members. Last year there was a weiner roast at the home of Mrs. Isabel Kellogg, who was then the clinical director. For the girls arriving in March, a "get acquainted" party was held in the recreation room of the Orthopaedic Department and humorous skits about clinical training were given, after which refreshments were served.

Each year at Christmas time, Illi-Sota members and the staff have great fun practicing carols. One evening during Christmas week these are sung by candle light to the accompaniment of a portable organ for the pleasure of patients on all services of the hospital. It is a very impressive and effective procession through the quiet corridors and very much appreciated by patients unable to spend the holidays with their families. After the Christmas caroling, a party is held to celebrate the season as well as to give a farewell party to graduating students. At this time class wills and prophecies are read and those graduating are presented with small ceramic diplomas. There is also a special party for those graduating in the spring when similar diplomas are given.

In February a Student Carnival is sponsored by students from Medical, Dental and Pharmacy Colleges. This past year the occupational therapy students spent may hours planning and making their booth. Since quite a number of students in the group enjoyed square dancing, it was decided that this would be a colorful theme as well as an enjoyable one. The decorations for the booth were of a rough rustic nature with students dressed in plaid shirts and jeans, and some in peasant skirts and blouses. A great deal of fun was had by all. The calling was done by the occupational therapy students and many people attending the carnival participated.

Illi-Sota has a luncheon meeting every two weeks. Students affiliating at nearby Cook County Hospital are invited to join the group. In this way we can become better acquainted with students from other schools as well as giving those students an opportunity to keep in touch with an occupational therapy group while away from their home schools. Once a month the entire group participates in a purely social activity such as going to a radio broadcast, dinners in interesting places, theatres, picnics, and beach parties.

The Illi-Sota Newsletter is published three times each year and is composed of news from both campuses as well as information about alumni. It is published in Chicago and is sent to students on both campuses as well as alumnae.

Book Reviews

REHABILITATION OF THE HANDICAPPED BIBLIOGRAPHY 1900-1946

By Maya Riviere
Field Consultant, Rehabilitation Service
National Tuberculosis Association
with foreword by
Holland Hudson
Director of Rehabilitation Service
National Tuberculosis Association

Published by
The Livingston Press, Livingston
Columbia County, New York

1024 pages, in two volumes. $10.00 the set, postpaid.

Reviewed by: Wanda Misbach Edgerton, O.T.R.

Here are two amazing volumes which should prove as essential as a dictionary to any center dealing with rehabilitation problems, or training students for service in any phase of that work.

Preparation of a bibliography on current literature dealing with rehabilitation was proposed in 1942 soon after the National Council on Rehabilitation was formed. Its purpose was "to chart orientation in the total subject for workers drawn from allied professions, to provide sources of information for further study, and to attempt to provide clues leading toward healthy development of standard techniques and vocabulary." 1940 was selected as the beginning of such a work since World War II had given new impetus to publications in this field. Following the compilation of material through 1946 the Office of Vocational Rehabilitation, the staff of which had been in touch with the development of the study throughout, announced that they would continue the work by beginning in 1947 the quarterly publication of "Rehabilitation Abstracts" which would be available to workers on request. This affords a fine continuity of material from 1940 to date.

The bibliography itself is prefaced by an introduction with an explanation of the system used in collecting, selecting and classifying the tremendous amount of material, directions on how to find what you seek, and an explanation of the code used.

One complete volume and approximately half of the second are given over to an alphabetical arrangement of authors and titles of articles, books or phamphlets dealing with any phase of rehabilitation. These are abstracted succinctly. The remainder of the second volume is made up of indices, one of authors, one of publishers, one of films, film

catalogs, film sources, and a general index with item numbers listed which make it an easy matter to turn to all items concerned, directly or indirectly, with the subject pursued.

Filmstrips are still pictures designed for projection. The frames may be turned as quickly as the audience requires allowing time for study and discussion.

A filmstrip projector is necessary for best results. The main advantage of filmstrips is to provide demonstrations of techniques not otherwise available which may be used as auxilary teaching aids.

CRUTCH WALKING

Filmstrips Inc.
Prepared by Department of Physical Medicine and Rehabilitation
New York University, College of Medicine
Part 101 CRUTCH EXERCISES
Part 102 THE FOUR POINT GAITS
Part 103 THE TRIPOD GAITS

Reviewed by: Isabel March Kellogg, O.T.R.

The teaching guide has many valuable suggestions for using this set of strips for demonstration and motivation for patients. Patients may try position and movements while viewing the projected picture. Each part has specific suggestions and gives attention to details in teaching patients.

These strips are extremely well done and are a valuable auxilary aid in the hospital or classroom.

REHABILITATION OF HEMIPLEGIC

35m.m. Film Strip
Film Strips Incorporated
140 W. 86th Street, New York, N. Y. $3.00
"A teaching filmstrip produced by the Institute of Rehabilitation and Physical Medicine,
New York University, Bellevue Medical Center"

Reviewed by: Isabel March Kellogg, O.T.R.

The teaching guide accompanying this filmstrip is very complete, giving causes of hemiplegia and procedure for rehabilitation. There is a step by step outline very carefully and clearly worked out. Only a few of the procedures are shown in the film strips but they are the basic ones and should be used only as a guide, not by any means the total program.

Each frame of the film strip is explained. These films should be used along with practical demonstrations for students of the procedures for rehabilitation for hemiplegia. They might also be used for a class of hemiplegic patients.

THE BLINDED BILATERAL

Ralph J. Anslow
The Kessler Institute for Rehabilitation
Pleasant Valley Way, West Orange, New Jersey, 1949
Rehabilitation Series No. 1

Reviewed by: Isabel March Kellogg, O.T.R.

In this well written and illustrated booklet, the author describes through personal experience and study how blinded, bilateral arm amputees can lead a useful, productive life.

Mr. Anslow was injured in a land mine explosion during the war and during his rehabilitation studied and worked on prosthetic appliances and wrote this booklet. The *greatest enemy* of one so limited is *inactivity* and so he should be occupied in mental and physical activity.

The author has done an outstanding piece in describing each daily activity, such as personal care, eating and many miscellaneous uses of the hooks to make himself more independent. These are well worded and illustrated making this manual an ideal one for assisting any patient similiarly limited. It is an excellent manual to recommend for anyone attending this same individual. It should be added to reference libraries and to your own bibliography.

KINESIOLOGY OF CORRECTIVE EXERCISE

Gertrude Hawley, M. A.
Formerly Head of Corrective Gymnastics at Stanford and Northwestern Universitites.
2nd Edition Revised
Lea and Febiger, Philadelphia, 1949, $3.75

Reviewed by: Isabel March Kellogg, O.T.R.

This text is divided into two parts.

(1.) Covers fundamental anatomical and pathological considerations, and discussion of visceroptosis and scoliosis.

(2.) Gives corrective exercises and positions including careful analyses of corrective exercises for conditions which require remedial care.

The text is interpersed with many excellent illustrations pointing out specific positions and exercises.

This book is a complete and practical text on the therapeutics of movement.

APPLIED ANATOMY AND KINESIOLOGY

By Wilbur Pardon Bowen, M. S. Late Professor of Physical Education Michigan State Normal College, Ypsilanti, Michigan
6th Edition Revised By
Henry A. Stone, M. S. Associate Supervisor, Department of Physical Education, University of California, Berkeley, California.
Lea and Febiger, Philadelphia, 1949, $4.75

Reviewed by: Isabel March Kellogg, O.T.R.

This text is a revised edition of kinesiology presented in modern terms and includes many advances made in physiology. It is a functional approach to the subject. The material is concise.

The text deals with the muscles; structure and control, including mechanical principles and a chapter on the chemistry of muscle action. Movements of each part of the body are analyzed and presented in detail to the simplest elements. There is an excellent section for review and study of the integration and classification of muscle action.

ABSTRACTS

INDUSTRIAL MEDICINE AND SURGERY

Vol. 18—No.9—September 1949

Engineering Methods in Occupational Therapy and Industrial Rehabilitation

A. R. Thompson M.D.

Concerns rehabilitation in Great Britian.

Those with permanent disabilities are cared for under the Disabled Persons Employment Act, through a program of vocational training and placement within industry. The short term disability, however, presents more of a problem. In Britian, 30% of all accidents are sustained in work, and account for one-half million casualties yearly. The author feels that an efficient accident and rehabilitation service should form a part of every modern industrial medical department.

The Vauxhall rehabilitation center is described: a center serving 12,000 people — 9,000 of whom are manual workers engaged in the manufacture of motor vehicles. An impressive group of medical specialists work together as a rehab-

ilitation team. Their activities are centered about the Retraining Shop, where standard machines and bench assembly work are adapted for remedial work and graded exercise.

Continuous treatment from the moment of injury up to return to full work is aimed at in every case. The application of engineering methods to occupational therapy is one of the most interesting and fascinating developments which has emerged from the scheme. Examples of this work are shown in excellent photographs which accompany the article.

TUBERCULOLOGY

Vol. 10—No. 4—July 1949

Physical Medicine and Rehabilitation in the Treatment of Tuberculosis

Morris Rubinstein M.D.

Presents a brief outline of the Physical Medicine Rehabilitation program as set up at Veteran's Administration Center, Whipple, Arizona. Stress is placed on treatment of the whole individual, not only his lungs. Rehabilitation is begun shortly after admission (physical condition permitting): when patients attend indoctrination classes.

A summary of physical therapy and occupational therapy procedures is given — with O.T. divided into two classifications: (1) Tonic therapy, and (2) Metric therapy. Tonic therapy is given to keep patients occupied, and to maintain tone of body and mind. Metric therapy is used to measure work capacity (a form of graduated exercise).

The function of Manual Arts Therapy and Educational Therapy is also summarized — and stress is placed on the coordination of all services.

SATURDAY EVENING POST

September 24, 1949

That Problem Child

Harry T. Paxton

Presents a detailed picture of life at the Devereux Schools, near Philadelphia. Many colored illustrations of student activities accompany the article.

While this material does not pertain specifically to O.T.— it does contain much of interest, particularly for those in the fields of pediatrics or psychiatry.

ARCHIVES OF PHYSICAL MEDICINE

Vol. 30—No. 10—October 1949

Administration of a Medical Rehabilitation Service in a Neuropsychiatric Hospital

Daniel Dancik M.D.

This article strongly recommends the installation of a medical rehabilitation department in all neuropsychiatric hospitals as an adjunctive service to the therapy of the patient. It states that the aim of medical rehabilitation in a neuropsychiatric hospital is to assist in the restoration of the patient into a social medium.

The set-up at Veteran's Administration Hospital, Northport, New York, is described; and the specific functions of the various branches of the medical rehabilitation service are summarized.

ARCHIVES OF PHYSICAL MEDICINE

Vol. 30—No.10—October 1949

The Rehabilitation of the Amputee

George G. Deaver M.D.

Earle H. Daniel

The introduction to this paper states: "The purpose of this paper is to review the salient factors pertaining to amputations, and the procedures which have been found successful in the rehabilitation of the amputee."

Then follows an 18 page treatise — a complete and concise coverage of the following material:

Causes of Amputations
Purpose of Amputations
Sites and Types of Amputations
The Ideal Stump
The Mental Handicap Caused by Amputations
The Physical Handicap Caused by Amputations
Procedures in Rehabilitation
Crutch Walking for Amputees
Prosthetic Appliances
Training in the Use of Artificial Limbs

Very worth-while reading — scholarly and well presented.

THE AMERICAN JOURNAL OF PSYCHIATRY

Vol. 106—No. 4—October 1949

America's Number One Problem — Chronic Disease and An Aging Population

Howard A. Rusk M.D.

Dr. Rusk points out that, "One of our great medical needs today is the provision of total treatment of chronically ill patients in terms of the everyday problems of living which they face."

He then discusses various types of geriatric situations: Rehabilitation in General Hospitals; Homes for the Aged; The Senile Psychotic; Day Centers for the Aged; and finally, Medicine's Responsibility, where he concludes: "Medicine has concentrated in the past on the prevention of death; now we must also concentrate on the enrichment of life."

READERS' DIGEST

December 1949

Better Toys for Your Child

Laird S. Goldsborough

Presents an analysis of the needs of each age group, up to ten years. For each age group, a general type of toy is suggested — and then specific examples are given.

Special mention is made of the "Raw Materials of Play": water play, old clothes, wrapping paper, etc. The article closes with this reminder: "It is not what the toy does or how much you pay for it that counts, but what the child does creatively with the toy".

ARCHIVES OF PHYSICAL MEDICINE

Vol. 30—No. 8—August 1949

Physical Medicine in Amputations

Fred W. Hark, M.D.

The author begins by saying: "The thought of losing a part of one's body is not a pleasant one. Nevertheless, there are instances when it is the wiser bargain to exchange a member or part thereof for an extension of the lease on life." Rules to help decide for or against amputation are presented. Various types of amputations, and the ensuing physical limitations are discussed. Prosthetic exercises are described, with the aid of illustrations.

Finally, the principles of gait and balance are given, with the reminder that it takes practise to gain a certain momentum of swing to the limb to gain rhythm and stride — and that this result should always be our goal.

COLLIER'S

November 26, 1949

You'd Never Know Our Daughter Is An Epileptic

Herbert and Dixie Yahraes

This article was written by the parents of a nineteen year

old epileptic. The problems which they have encountered in attempting to raise their daughter in a normal life situation are frankly discussed. Although Dixie Lou's condition is now well-controlled; she is socially adjusted, and doing well in her college work — her greatest problem continues to be prejudice. It is in this connection that occupational therapy enters the article; for, when Dixie Lou decided, after one year at college, to become an O.T. "because I have been helped so much myself, I want to work at something that will help others", she was rejected by three schools. According to the article, she was told at each school, "We are certain an epileptic couldn't stand the strain."

This article contains much information for the general reader, and presents a wealth of material for those concerned with epilepsy.

CLASSIFIED ADVERTISING

Classified advertising accepted for POSITIONS WANTED and POSITIONS AVAILABLE only. Minimum rate $3.00 *for* 3 *lines: each additional word ten cents.* (*Average* 56 *spaces per line*). *Copy deadline first of each month previous to publication.*

POSITIONS AVAILABLE

Wanted: Staff therapist at Rhode Island Hospital (500 bed general hospital) and therapist at Crawford Allen Unit (convalescent hospital for children). Four weeks vacation, holidays and sick leave with pay; Blue Cross; laundry. Write: Mary Pratt, O.T.R., Rhode Island Hospital, Providence, Rhode Island.

Occupational therapist to direct the department and give training and instruction to children and also qualified to supervise and instruct affiliating occupational therapy students. Write: James Lawrence Kernan Hospital, Baltimore, Maryland.

Occupational therapist for 41-bed Tuberculosis Sanatorium, Olean, New York. Salary range $145 to $185, plus full maintenance. Retirement plan, vacation with pay, attractive working and living quarters. Write: Dr. John S. Wisely, Supt., Rocky Crest Sanatorium, Olean, New York.

Opportunity for two friends who would like to live and work together carrying on the occupational therapy program in a 120-bed tuberculosis sanatorium. Present director and assistant leave March 1, 1950, to establish a treatment center in New England. Director must be registered therapist. For details concerning unusually attractive working and living conditions, write Dr. M. D. Bonner, M.D., Superintendent, Guilford, County Sanatorium, Jamestown, North Carolina.

The New York State Department of Mental Hygiene needs occupational therapists. Salary $2760-$3450, maintenance optional. Career advantages by promotional examination to Senior and Supervising positions. Contact Virginia Scullin, Director of Occupational Therapy, New York State Department of Mental Hygiene, State Office Building, Albany, New York.

Positions open for registered occupational therapists at 1600 bed mental hospital in midwest. Experience not necessary. Salary $200 per month plus full mantainence. Good experience for new graduates in functional application of O.T. in mental disorders. Regular meetings of medical and O.T. staffs. Excellent living conditions in newly constructed building. Write Max E. Witte, M.D., Supt., Independence State Hospital, Independence, Iowa.

FAIRFIELD STATE HOSPITAL, Newton, Connecticut. Hospital population 2600. Affiliation program for Nursing and O.T. Schools. Convenient proximity to N. Y. C. Minimum gross salary $2460; Senior O.T. $3060.

Registered occupational therapists, 3000 bed psychiatric hospital located in city. Civil Service — maintenance if desired. Excellent opportunity for professional growth. Write to Miss Inez Huntting, O.T.R., Boston State Hospital, Boston 24, Massachusetts.

Wanted by large general hospital, New York City, experienced occupational therapist. Write Box A 10.

Occupational and recreational therapist for small mental state hospital. Position offers excellent opportunities for person with initiative and enterprise. Initial salary $2100.00 per year, plus full maintenance. Write Supt. P. O. Box 2460, Reno, Nevada.

Challenging opportunity for chief occupational therapist and occupational therapists in all phases of psychiatric occupational therapy. Civil service appointment. Beginning salaries $3204-4092 depending on experience. Developments of exceptional treatment training and research center in conjunction with Menninger Foundation. Contact Coordinator of Adjunctive Therapies, Topeka State Hospital, Topeka, Kansas.

Occupational Therapists — Men and Women. To organize and develop program in mental institutions. Train and supervise assistants. Good opportunity for original work. Civil service positions. Salary begins at $272; provision for increases. Paid vacations and sick leave. Apply to Bureau of Personnel, State Capitol, Madison, Wisconsin.

Name of School	Name & Address of Director	Tuition	Type of Course	Entrance Requirements	Classes Start	Length of Course	Students M	Students F	Enrollment
Boston School of Occupational Therapy Affiliated with Tufts College	Mrs. John A. Greene, President Boston School of Occupational Therapy, 7 Harcourt Street Boston 16, Massachusetts	$500/acad. year $200 clin. training	a. Advanced Standing (Diploma	*College degree or accredited professional training	Sept.	1 acad. yr. plus 10-12 mos. clin. training	Yes	Yes	115
		$500/acad. year $200 clin. training	b. Degree (B.S. in Education) from Tufts plus B.S.O.T. diploma	As for the college; qualified transfer student (Soph. yr. only)	Sept.	4 acad. yrs. plus 12 mos. clin. training	Yes	Yes	
Colorado Agricultural and Mechanical College Division of Home Economics	Asst. Prof. Helen T. Rea, O.T.R. Director of Occupational Therapy Division of Home Economics Colorado Agricultural and Mechanical College Ft. Collins, Colorado	$180/acad. year $230 for out-of-state residents; $55 clin. training	Degree (B.S.)	As for the College; qualified transfer student	Sept.	4 acad. yrs. plus 10 mos. clin. training	Yes	Yes	55
Columbia University College of Physicians and Surgeons	Miss Marjorie Fish, O.T.R., Director Miss Marie Louise Franciscus O.T.R., Acting Director of Training Courses in Occupational Therapy Columbia University, College of Physicians & Surgeons, 630 West 168th Street New York 32, New York	$600/acad. year	a. Degree (B.S.) from Faculty of Medicine	*2 yrs. college	Sept.	2 acad yrs. plus 9 mos. clin. training	Yes	Yes	76
		As above	b. Advanced Standing (Certificate)	College degree or accredited professional training	Sept.	1 acad. yr. plus 9 mos. clin. training	Yes	Yes	
Illinois, University of College of Medicine	Assoc. Prof. Beatrice D. Wade, O.T.R., Director of O.T. Curriculum Department of Physical Medicine Section of Occupational Therapy University of Illinois 1853 West Polk Street Chicago 12, Illinois	$55/acad. year $101 for out-of-state residents	Degree (B.S. in O.T.) from College of Medicine	As for the College	Oct. Feb.	4 acad. yrs. plus 10 mos. clin. training	Yes	Yes	84
Iowa, State University of College of Liberal Arts and College of Medicine	Asst. Prof. Marguerite McDonald, O.T.R., Occupational Therapy Supervisor Division of Physical Medicine College of Medicine State University of Iowa Iowa City, Iowa	$130/acad. year $300 for out-of-state residents	Degree (B.S.) from College of Liberal Arts plus Certificate from College of Medicine	*As for the university	Sept. Feb.	4 acad. yrs. plus 10 mos. clin. training	Yes	Yes	44
Kalamazoo, School of Occupational Therapy of Western Michigan College of Education	Assoc. Prof. Marion R. Spear O.T.R., Director of Occupational Therapy Kalamazoo School of Occupational Therapy of Western Michigan College of Education Kalamazoo 45, Michigan	$140/acad. year $215 for out-of-state residents	a. Degree (B.S. with major in OT) plus diploma	As for the college; qualified transfer student	Sept. Feb.	Approximately 3½ acad. yrs. plus 9 mos. clin. training	Yes	Yes	144
		As above	b. Advanced Standing (Diploma)	Degree	Sept. Feb.	2-3 semesters plus 9 mos. clin. training	Yes	Yes	

*Schools having additional requirements.

Name of School	Name & Address of Director	Tuition	Type of Course	Entrance Requirements	Classes Start	Length of Course	Students M	Students F	Enrollment
Kansas, University of School of Occupational Therapy	Asst. Prof. Nancie B. Greenman, O.T.R., Director of Occupational Therapy University of Kansas Lawrence, Kansas	$100/acad. year $200 for out-of-state residents	Degree (B.S. in O.T.)	As for the university; qualified transfer student	Sept. Feb.	4 acad. yrs. plus 12 mos. clin. training	No	Yes	90
Michigan State Normal College	Asst. Prof. Gladys Tmey, O.T.R. Supervising Director of Occupational Therapy Michigan State Normal College Ypsilanti, Michigan	$118/acad. year $193 for out-of-state residents	Degree (B.S. with major in O.T.)	*As for the college	Feb. June Sept.	4 acad. yrs. plus 10 mos. clin. training	Yes	Yes	70
Mills College	Mrs. Elsa H. Hill, M.A., O.T.R. Director of Occupational Therapy Mills College Oakland 13, California	$650/acad. year $84 clin. training	a. Degree (B.A. with major in O.T.) plus Certificate	As for the college; qualified transfer student	Sept. Feb.	4 acad. yrs. plus 9 mos. clin. training	Yes	Yes	12
		$250/acad. year $84 clin. training	b. Certificate	Degree from accredited college	Sept. Feb.	1½ acad. yrs. plus 9 mos. clin. training	Yes	Yes	4
Milwaukee-Downer College	Prof. Henrietta McNary, O.T.R. Director, Department of Occupational Therapy Milwaukee-Downer College 2512 East Hartford Ave. Milwaukee 11, Wisconsin	$350/acad. year $35 clin. training	a. Degree (B.S. with major in O.T.)	*As for the college; qualified transfer student	Sept.	4 acad. yrs. plus 10 mos. clin. training	No	Yes	135
			b. Diploma	*As above plus 1 yr. college or professional training; qualified transfer student	Sept.	2 acad. yrs. plus 10 mos. clin. training	No	Yes	
Minnesota, University of School of Medicine	Miss Borghild Hansen, O.T.R. Director of Occupational Therapy University of Minnesota Minneapolis, Minnesota	$126/acad. year $270 for out-of-state residents	Degree (B.S. in O.T.)	2 years Arts College; qualified transfer student	Sept.	3-1/2 acad. yrs. plus 10 mos. clin. training	Yes	Yes	39
Mount Mary College	Sister Mary Arthur, O.T.R. Director of Occupational Therapy Mount Mary College Milwaukee 13, Wisconsin	$200/acad. year $10 clin. training	Degree (B.S.) plus Certificate	As for the college; qualified transfer student	Sept.	4 acad. yrs. plus 9 mos. clin. training	No	Yes	41
New Hampshire, University of College of Liberal Arts	Asst. Prof. Doris F. Wilkins, O.T.R. Supervisor of Occupational Therapy Curriculum University of New Hampshire Durham, New Hampshire	$200/acad. year $60 clin. training $450 for out-of-state residents $135 clin. training	Degree (B.S. with major in O.T.) plus Certificate	*As for the university	Sept.	4 acad. yrs. plus 10 mos. clin. training	Yes	Yes	85

Name of School	Name & Address of Director	Tuition	Type of Course	Entrance Requirements	Classes Start	Length of Course	Students M	Students F	Enrollment
New York University School of Education	Asst. Prof. Frieda J. Behlen, O.T.R. Director of Occupational Therapy Curriculum New York University Washington Square New York 3, New York	$500/acad. year $127.50 clin. training As above	a. Degree (B.S.) plus Certificate b. Certificate c. Graduate (M.A.)	*As for the university; qualified transfer student One year college O.T.R. or eligible for O.T.R. with college degree	Sept. Feb. June As above	4 acad. yrs. plus 10 mos. clin. training 2-1/2 acad. yrs. plus 10 mos. clin. training	Yes Yes	Yes Yes	120
Ohio State University College of Education	Assoc. Prof. Martha E. Jackson, O.T.R. Chairman, O.T. Department The Ohio State University Columbus 10, Ohio	$30/quarter $105/quarter for out-of-state residents	Degree (B.S. in O.T.)	*As for the university; qualified transfer students	Sept. Jan. March	10 quarters plus 10 mos. clin. training	Yes	Yes	55
Philadelphia, School of Occupational Therapy Affiliated with University of Pennsylvania—School of Education	Miss Helen S. Willard, O.T.R. Director, Philadelphia School of Occupational Therapy 419 South 19th Street Philadelphia 46, Pa.	$600/acad. year $200 clin. training $500/acad. year $200 clin. training	a. Degree (B.S. from University) plus Diploma of P.S.O.T. b. Advanced Standing (Diploma)	*As for the university; qualified transfer student *College degree or professional training	Sept. Sept.	4 acad. yrs. plus 10 mos. clin. training 1 acad. yr. plus 10 mos. clin. training	No No	Yes Yes	89
Puget Sound, College of	Miss Edna-Ellen Bell, O.T.R. Director of Curriculum in Occupational Therapy and Rehabilitation College of Puget Sound Tacoma 6, Washington	$300/acad. year $100 clin training	a. Degree (B.S. in O.T.) b. Certificate	As for the college; qualified transfer student One year college	Sept. Jan. Sept. Jan.	4 acad. yrs. plus 10 mos. clin. training 2 acad. yrs. plus 10 mos. clin. training	Yes Yes	Yes Yes	41
Richmond Professional Institute of the College of William and Mary	Miss H. Elizabeth Messick, O.T.R. Director, School of Occupational Therapy Richmond Professional Institute 901 West Franklin Street Richmond 20, Virginia	$200/acad. year $300 for out-of-state residents	a. Degree (B.S. in Psychology) b. Certificate c. Advanced Standing (Certificate)	As for the college; qualified transfer student One year college (30 semester credits) College degree	Sept. Sept. Sept.	4 acad. yrs. plus 10 mos. clin. training 2 acad. yrs. plus 10 mos. clin. training 1 acad. yr. plus 10 mos. clin. training	Yes Yes Yes	Yes Yes Yes	58
Saint Catherine College of	Sister Jeanne Marie, O.T.R. Director of Occupational Therapy The College of Saint Catherine St. Paul 1, Minnesota	$210/acad. year	Degree (B.S.)	*As for the college; qualified transfer student	Sept. Jan. March	4 acad. yrs. plus 9 mos. clin. training	No	Yes	40

Name of School	Name & Address of Director	Tuition	Type of Course	Entrance Requirements	Classes Start	Length of Course	Students M	Students F	Enrollment
San Jose State College	Asst. Prof. Mary Booth, O.T.R. San Jose State College San Jose 14, California	$24/acad. year	a. Degree (B.A.)	As for the college	Oct. Jan. April	4 acad. yrs. plus 9 mos. clin. training	Yes	Yes	117
		As above	b. Advanced Standing (Certificate)	College degree	As above	1 acad. yr. plus minimum of 9 mos. clin. training	Yes	Yes	
Southern California University of College of Letters, Arts and Sciences	Prof. Margaret S. Rood, O.T.R. Head of Department of Occupational Therapy University of Southern California Box 274, Los Angeles 7, California	$480-$512 acad. year $75 clin. training	a. Degree (B.S.) plus Certificate	*As for the university	Sept. Feb. July	4 acad. yrs. plus 9 mos. clin. training	Yes	Yes	107
		$528/acad. year $75 clin. training	b. Advanced Standing (Certificate)	College degree	As above	1 acad. yr. plus 9 mos. clin. training	Yes	Yes	
		$448/acad. year	c. Graduate (M.A.)	OTR or eligible for OTR with college degree 1 yr. experience in O.T.	Sept. preferably	1 acad. yr.	Yes	Yes	
Texas State College for Women Department of Art	Assoc. Prof. Fanny Vanderkooi, O.T.R., Supervisor of O.T. Course Texas State College for Women Denton, Texas	$50/acad. year $150 for out-of-state residents	Degree (B.S. or B.A. with major in O.T.)	As for the college	Sept. Feb.	4 acad. yrs. plus 9 mos. clin. training	No	Yes	46
Toronto, University Department of University Extension	W. J. Dunlop, B.A., B.Paed., LL.D., Dir, University Extension, Course in Occupational Therapy, University of Toronto Toronto, Canada		Diploma	Senior Matriculation		3 acad. yrs. plus 10 mos. clin. training	No	Yes	
Washington University School of Medicine	Asst. Prof. Erna L. Rozmarynowski, O.T.R., Director, Department of Occupational Therapy Washington University School of Medicine 4567 Scott Avenue St. Louis 10, Missouri	$400/acad. year $100 clin. training	Degree (B.S. in O.T.)	60 semester college credits 36 of which are in required subjects	Sept.	2 acad. yrs. plus 10 mos. clin. training	Yes	Yes	32
Wayne University College of Liberal Arts and College of Education	Asst. Prof. Barbara Jewett, O.T.R. Director of Occupational Therapy Wayne University Detroit 1, Michigan	$150/acad. year	a. Degree (B.S. in O.T.)	As for the university	Sept. Feb. June	4 acad. yrs. plus 10 mos. clin. training	Yes	Yes	60
		As above	b. Advanced Standing (Certificate)	*College degree	As above	1 acad. yr. plus 10 mos. clin. training	Yes	Yes	
Wisconsin University of School of Medicine	Asst. Prof. Caroline G. Thompson, O.T.R., Director of Occupational Therapy University of Wisconsin 1300 University Ave. Madison 6, Wisconsin	$150/acad. year $450 for out-of-state residents	Degree (B.S. in O.T.) from School of Education plus Certificate from School of Medicine	As for the university	Sept. Feb.	4 acad. yrs. plus 10 mos. clin. training	Yes	Yes	104

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(Signed)
COLORADO O.T. ASSOCIATION